Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of

Developing a Unified Intercarrier Compensation Regime CC Docket No. 01-92

COMMENTS OF THE OFFICE OF PUBLIC UTILITY COUNSEL OF TEXAS

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COMMENTS OF THE OFFICE OF PUBLIC UTILITY COUNSEL OF TEXAS

The Office of Public Utility Counsel of Texas ("OPUCT") hereby submits the following comments in response to the Federal Communications Commission's Notice of Proposed Rulemaking in CC Docket No. 01 - 92, In the Matter of Developing a Unified Intercarrier Compensation Regime, hereinafter referred to as the "NPRM."

I. EXECUTIVE SUMMARY

As Commissioner Furchtgott-Roth notes in his Separate Statement to the NPRM: "For its entire history, the Commission has regulated telecommunications rates with a heavy, clumsy, at times sadistic, and all too visible hand." This is perhaps no more true than with respect to the policies promulgated in the Commission's recent *ISP Intercarrier Compensation Order*¹ and proposed in this *NPRM*.

With the passage of the Telecommunications Act of 1996 and the FCC's *Local Competition Order*,² an invitation went out to the entrepreneurs of this country to help the nation convert its slow moving, hundred year old, local telephone monopoly into a dynamic and competitive industry. The provisions of the Telecommunications Act of 1996 and the rules promulgated by the FCC's *Local Competition Order* were sound, consistent with good public policy and economic principles, and showed that policymakers were serious about promoting competition: the invitation looked promising. With the ground rules in place, entrepreneurs – large and small – responded and committed hundreds of billions of dollars to building competitive local networks.³ Not even six years after the passage of the Telecommunications Act of 1996, those investments are now worth a fraction of their original value. Bonds issued to build fiber-optic networks are trading at less than 50 cents on the dollar and assets of the many companies in bankruptcy can be had for pennies on the dollar.⁴

To some degree, the FCC's *ISP Intercarrier Compensation Order* must be viewed as a catalyst in the current calamity. According to the FCC's own estimates, the competitive local

¹ In the Matter of Intercarrier Compensation for ISP-Bound Traffic, CC Docket No. 99-68, *Order on Remand and Report and Order*, FCC 01-131 (rel. Apr. 27, 2001) ("*ISP Intercarrier Compensation Order*").

² Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, 15509, (1996) ("Local Competition First Report and Order")

³ Estimates on how much investors borrowed range from \$450 billion to \$700 billion. See, "Telecom defaults drawing comparison to S&L crisis," *Denver Post*, Business section, August 12, 2001.

⁴ Over the last six months no less than 31 CLECs have filled for bankruptcy. See "PointOne is latest telecoms sector casualty," *Financial Times*, August 18, 2001. Page 8.

exchange carriers ("CLECs") billed approximately two billion dollars annually for intercarrier compensation, "ninety percent of which is for ISP-bound traffic." These revenues, which were going straight to the bottom line, have now been virtually eliminated – not because of competitive developments, but at the stroke of a pen wielded by the "all too visible hand" of regulators. To be sure, the FCC changed the rules of engagement in mid fight.

In its defense, the FCC notes that its proposed rates "provide a reasonable transition from dependence on intercarrier payments *while ensuring cost recovery*." (Emphasis added.) However, this claim may not withstand scrutiny. There were few, if any, profitable CLECs before the FCC and state commissions started to reduce compensation for ISP-bound traffic. It is difficult to see, therefore, how eliminating no less than two billion dollars of annual revenues from an industry that is already in a state of meltdown is "ensuring cost recovery."

Most disturbingly, the FCC's policies to view the one-way nature ISP-bound traffic as problematic are a radical shift from traditional polices and could not reasonably have been anticipated by entrepreneurs. For example, traffic and compensation flows between incumbent local exchange carriers ("ILECs") and providers of commercial mobile radio services ("CMRSs") are traditionally out of balance and heavily in favor of the ILECs – *and at dollar values far larger than those for ISP-bound traffic.*⁷ The FCC has yet to express a concern about the one-way nature of these CMRS-ILEC transactions.⁸

Moreover, many observers of the industry perceived the migration of ISPs to CLECs as a promising sign that local competition was working. ILECs were "hostile, unyielding, and antagonistic" to ISPs, denying them quality service, 10 and more interested in competing against

⁷ In Texas alone, SWBT earned over \$200,000,000 in intercarrier compensation from wireless carriers, a number far greater than the amount paid to CLECs for ISP-bound traffic. See, *Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996*, Public Utility Commission of Texas, Docket No. 21982. Taylor Post-Hearing Brief, page 14.

⁵ Intercarrier Compensation for ISP-Bound Traffic Order, paragraph 5.

⁶ ISP Intercarrier Compensation Order, paragraph 8.

⁸ Even in the NPRM, at paragraph 65, the FCC notes that it is "not aware of complaints against CMRS carriers for excessive termination rates – even in unregulated interconnection arrangements – or for engaging in regulatory arbitrage." Again, the FCC appears completely unperturbed by the one-way nature CMRS-ILEC traffic causing consistent and massive payments from CMRS providers to ILECs.

⁹ Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 3.

¹⁰ TISPA documented the numerous "bad acts" SWBT has committed against ISPs in comments to the FCC in SBC's § 271 case. *See*, TISPA Reply Comments in CC Docket 00-04.

them than for them.¹¹ For the first time in history, however, customers had a choice, and ISPs did what every customer should have a right to do: they walked. And, competing CLECs did what they should have done: they put out their welcome mats and opened their doors. If there is market failure here, it is the ILECs' continued refusal to compete for ISPs; it is their refusal to offer efficiently priced collocation and ISDN services to ISPs (or any other carrier¹²) and to be responsive to customers' needs. The FCC should not underestimate the degree to which its policies are aiding the ILECs' attempts to undermine the independent ISP industry. OPUCT is most concerned here about the potential that eventually the ILECs, having established a dominant position for Internet access, may be able to impose usage sensitive charges, which is the ILECs' longstanding policy preference.¹³

Having shaken the foundations of the competitive industry in the *ISP Intercarrier Compensation Order*, the FCC is now announcing a second regulatory shock. In the *NPRM*, the FCC is proposing to impose mandatory bill and keep on all traffic between carriers. If adopted, this would eliminate not only all reciprocal and intercarrier compensation revenues, but also all switched access revenues. The policies are generally unsound. Given the weakened state of the competitive industry, however, these policies would also be most untimely.

In general, OPUCT believes that the bill-and-keep proposals advocated by the FCC in the NPRM will cause a number of serious problems. The mandatory bill-and-keep proposals will fracture the larger regime of total element long run incremental cost ("TELRIC") based rates that provide consistency across various proceedings involving cost concepts, such as USF proceedings, alternative regulation proceedings (with cost-based competitive safeguards) and UNE cost proceedings. The proposals will hurt the preservation and promotion of universal service and create various other undesirable consumer issues. Moreover, if carriers are forced to recoup the costs of terminating traffic from their own end-users, it may lead to significant and inappropriate cross-subsidies from low-volume users to high-volume users, further undermining state and federal universal service policies. The proposals will also create a host of arbitrage opportunities. Eventually, tariff arbitrage may force companies and regulators to revert to cost-based rates, contributing to further regulatory uncertainty in the industry. In short, the FCC's proposals would unnecessarily be inviting a large array of problems, many of which would harm residential and small business customers.

OPUCT believes that, in the long run, society's interests are better served by a three

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¹¹ In California, a group of ISPs plans to file a complaint with the California Commission, accusing Pacific Bell and an affiliate of engaging in anti-competitive practices. "Pacific Bell May Face Complaint," *The New York Times*, July 26, 2001, page C1.

¹² OPUCT will presently provide evidence that regulators' efforts notwithstanding, collocation rates remain excessively high relative to collocation hotels, a competitive benchmark.

¹³ As SBC notes: "ISPs should pay ... the costs of access ... just as IXCs do." See, SWBT's Response to Taylor Communications group, Inc.'s Petition for Arbitration, Texas Public Utility Commission, Docket No. 21982, page 7.

pronged approach: TELRIC-based rates for all intercarrier wholesale transactions; vigorous promotion of competition; and efficient, adequate, and competitively neutral universal service policies.

II. INTRODUCTION

The purpose of this *NPRM*, not coincidentally released in tandem with the *ISP Intercarrier Compensation Order*, is an ambitious one: to develop a unified regime for intercarrier compensation. In the words of the FCC, the purpose of the *NPRM* is:

to test the concept of a *unified regime* for the flows of payments among telecommunications carriers that result from the interconnection of telecommunications networks under current systems of regulation. Specifically, we seek comment on the feasibility of a *bill-and-keep approach for such a unified regime*. ¹⁴ (Emphasis added.)

In the *NPRM*, the FCC envisions adopting an intercarrier compensation regime referred to as bill and keep, not just for the exchange of local traffic but potentially for all traffic exchanged between carriers. Most significantly, unlike the provisions currently in place for bill and keep between carriers, which require that traffic be more or less balanced, the new regime would apply irrespective of the balance of traffic between carriers. In fact, it would apply even if traffic were entirely one-way. Moreover, the bill-and-keep proposals favored by the FCC would be mandatory and replace the Calling Party Network Pays ("CPNP") convention as the prevailing paradigm for intercarrier compensation. Much of the *NPRM* is cast in these ambitious terms.

¹⁵ See 47 C.F.R. § 51.713; Local Competition Order, 11 FCC Rcd. at 16028-29 ¶¶ 1063-64.

¹⁴ NPRM paragraph 1.

While the *NPRM* is seeking comment on how the implementation of mandatory bill and keep would affect the industry, a careful reading of the *NPRM* reveals that to a large extent the *NPRM* is motivated by a much more narrow issue. Specifically, at its core the *NPRM* is motivated by one-sided compensation payments made by ILECs to CLECs for ISP-bound traffic. As the FCC notes: "the concerns motivating this *NPRM* primarily stem from certain wireline interconnection situations, *particularly those involving LEC-ISP interconnection*." (Emphasis added.)

The tension in the *NPRM* between the larger objective of establishing a unified regime and the narrow one of coming to grips with reciprocal compensation payments for ISP-bound traffic has some unfortunate consequences. Ideally, of course, a unified regime would resolve most if not all problems, including the one that the FCC is struggling with in this *NPRM* and the *ISP Intercarrier Compensation Order*. The proposals set forth in the *NPRM*, however, do not have this unifying effect. To the contrary, they will fracture the consistency in regulatory policies across various proceedings, such as universal service proceedings, unbundled network element ("UNE") cost proceedings, and alternative regulation proceedings, all of which rely heavily on a consistent application and interpretation of cost concepts. The primary reason is that the FCC's proposals are too narrowly tailored around the issue of ISP-bound traffic. Specifically, the compensation policies the FCC adopted for ISP-bound traffic in its *ISP Intercarrier Compensation Order* are so deliberately *ad hoc* that they cannot be extended into a "unified regime." Yet, this is what the FCC is seeking to do in the current *NPRM*.

¹⁶ NPRM, paragraph 65. The same thought is expressed in, for example, paragraph 24.

To be sure, the bill-and-keep proposals contemplated in the *NPRM* are flawed and inconsistent with economic theory and the entire institutional structure of the telecommunications industry. The problems that would emerge from the FCC's proposed policies are the following:

- Unified Intercarrier Compensation Regime Issues: The FCC's proposals for mandatory bill and keep will fracture the larger regime of TELRIC-based rates that provides consistency across various proceedings involving cost concepts, such as USF proceedings, alternative regulation proceedings (with cost based competitive safeguards) and UNE cost proceedings. It would be far better to extend the current regime of cost-based rates to all aspects of intercarrier compensation and to ensure that costs are determined based on the FCC's TELRIC methodology, as discussed in its Local Competition Order.
- Universal Service and Consumer Issues: The proposals for mandatory bill and keep will force carriers to recoup the costs of terminating traffic from their end-users. This will almost certainly hurt the preservation and promotion of universal service and create various other undesirable consumer issues. It may also lead to significant and inappropriate cross-subsidies from low-volume users to high-volume users; these cross-subsidies would contravene state and federal universal service policies.
- *Policy Precedents:* To motivate its proposed departure from CPNP, the FCC provides a number of observations: certain ILECs have proposed bill-and-keep arrangements for certain classes of traffic¹⁷; large Internet backbone providers often enter into peering arrangements that are based on bill and keep¹⁸; OPP working papers discussed in the *NPRM* have suggested justifications for bill-and-keep arrangements¹⁹; bill-and-keep proposals may be seen as following the precedent of the Commission's 1980 *Computer II* decision that deregulated CPE.²⁰ None of these observations is particularly convincing.
- *ISP Intercarrier Compensation Issues:* To the extent that the *NPRM* is motivated by a concern about reciprocal compensation payments form ILECs to CLECs for ISP-bound

¹⁸ NPRM paragraph 43.

¹⁷ NPRM paragraph 43.

¹⁹ *NPRM* paragraph 43.

²⁰ NPRM paragraph 41.

traffic, this issue is far better resolved by a *market-based approach* that forces ILECs to compete for ISPs. This would preserve the independent ISP industry, now threatened with extinction.

- Arbitrage Issues and Regulatory Efficiency: The proposals for mandatory bill and keep
 will create a host of arbitrage opportunities. Eventually, tariff arbitrage may force
 companies and regulators to revert to cost-based rates, contributing to further regulatory
 uncertainty in the CLEC industry. By contrast, an emphasis on TELRIC-based rates and
 competition will gradually diminish the role of regulators and resolve issues far more
 efficiently and satisfactorily than regulators could.
- Regulatory Stability: The intercarrier compensation reductions ordered by the FCC and some state commissions have already contributed to a significant decline in CLEC market capitalization. The proposed policy changes will cause regulatory instability and further threaten the economic viability of the ailing CLEC industry.
- Competitive Issues: ILECs will be able to shift the costs for terminating traffic to high volume business customers onto residential end-users. This places CLECs at a distinct disadvantage (and will hurt residential rate payers in the process.) The bill-and-keep proposals will also undermine the unbundled network element platform ("UNE-P") as an efficient means of market entry by eliminating sources of revenue but not the associated costs. Ultimately, as the Regional Bell Operating Companies' ("RBOCs"") 271 approvals dilute the jurisdictional distinction between local and long distance calls, the FCC's proposals may destroy the economic viability of interexchange carriers ("IXCs"), one of the few areas of competition in the telecommunications industry.
- Legal Issues: There appears to be no support in the Telecommunications Act of 1996 for the FCC's mandatory bill-and-keep proposals. For local traffic, the Telecommunications Act of 1996 specifically notes that reciprocal compensation should be for the "additional cost of terminating such traffic." One can argue that bill-and-keep provides for reciprocal compensation only when traffic is approximately in balance. If traffic is significantly out of balance, or one-way, then bill and keep leaves the terminating carrier grossly undercompensated. For non-local traffic, such as ISP-bound traffic, carriers are also entitled to compensation from the cost causers.

Each of these issues is discussed in more detail below.

A. The Proposals for Mandatory Bill and Keep Do Not Represent a Unified Intercarrier Compensation Regime – a TELRIC-Based Regime Would Be Far Better.

OPUCT believes that the proposals put forth in the NPRM will move the industry away

from rather than toward a more unified regime of intercarrier compensation. The reasons for this are as follows.

First, the FCC's proposals are inappropriately based on narrow considerations regarding the termination of local and long distance traffic and ignore the broader categories of *wholesale transactions between carriers*. In general, carriers engage with one another on the wholesale level for a large number of services. In addition to compensation for local and long distance traffic, wholesale transactions between carriers include compensation for UNEs, transport, transitting, directory assistance, operator services, billing services. For a regime to be truly unified, it must at a minimum be consistent across all these types of transactions. Clearly, the FCC's bill-and-keep proposals are not: sometimes the use of another carrier's network is free, at other times charges apply.

Second, the FCC's proposals depend critically on transitional regulatory concepts regarding the jurisdictional nature of traffic. For example, under the FCC's proposals the use of a central office switch for the termination of local traffic between LECs would fall under some form of a bill-and-keep regime; use of the switch for traffic that is considered long distance traffic, however, may be assessed switch access charges. This dependence on regulatory distinctions between certain types of traffic is problematic. While currently concepts like local traffic, intrastate long distance traffic, and interstate long distance traffic are still relatively well defined, over time, as markets evolve and RBOCs enter long distance markets, these distinctions made by regulators for jurisdictional purposes will become virtually meaningless. In view of this, it is hard to see how an enduring unified regime can be based on such transitional concepts

as "local" or "long distance" traffic.

Third, the FCC's proposals fail to consider the impact on regulatory proceedings that critically depend on a *consistent application of cost concepts*. A consistent treatment of costs is important for universal service proceedings, UNE cost proceedings, and alternative regulation proceedings involving cost based competitive safeguards, such as cost imputation and prohibitions on predatory pricing.

The FCC's mandatory bill-and-keep proposals, however, contradict the very essence of its own TELRIC methodology. Specifically, the essence of the TELRIC methodology is that for a particular network element, say, a local switch, "a minute of use is a minute of use" irrespective of the service that uses the local switch. This TELRIC principle, which requires cost analysts to focus on network elements rather than services, is so basic and critical to cost proceedings that it is often repeated as a mantra. It also provides consistency across proceedings on UNE costs and rates, universal service support, reciprocal compensation, and a multitude of competitive safeguards under alternative regulation proposals. To be sure, under the FCC's proposals this unifying theme of TELRIC will be fractured as network elements would have different costs and prices depending on service specific circumstances: this is true for network functionalities, such as local switching, tandem switching and transport. In short, the inconsistencies introduced by the FCC's proposals in the application of cost concepts across these proceedings are bound to lead to serious problems.

Further, the FCC itself discussed a number of exceptions to its bill-and-keep proposals

that undermine the claim that the proposals will result in a unified regime. As the FCC indicates in the *NPRM*, it will most likely not mandate bill and keep for long distance traffic but maintain its CALLS plan, at least until June 30, 2005, and possibly thereafter.²¹ Also, the costs for transport facilities will be dealt with in varying ways, depending on whether transport concerns long or short distances between central offices, since distance more than almost any other variable determines whether a call is a local or a long distance call. If the distances for transport facilities are relatively short, then traffic is likely to be classified as local and cost recovery for trunking facilities would fall under one of the bill-and-keep proposals (DeGraba, Atkinson-Barnekov, or the relative peak traffic proposal); if distances for transport are longer, then traffic is most likely to be classified as long distance and cost recovery for trunking facilities would follow the traditional access/IXC paradigm. For cellular traffic, with different classifications of local and long distance traffic, yet other provisions will apply.

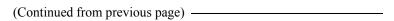
Obviously, the FCC's proposals will introduce a good deal of *inconsistency* in intercarrier compensation issues and may cause state and federal regulations to disintegrate into a patchwork of *ad hoc* policies. This would be most unfortunate, because finally, after decades of using non-economic costing methodologies, the industry appears well on its way to adopting a *unified regime* for intercarrier transactions on the wholesale level: compensation based on TELRIC.²² The progress made thus far would surely be undone if the FCC adopted the proposed policies,

²¹ See *NPRM* paragraph 97, where the FCC indicates that it does not "anticipate implementing major changes to [the] access charge rules.".

which are so narrowly tailored around select issues.

Instead of the narrow objectives that motivate the bill-and-keep proposals, the FCC should consider the following broader goals for intercarrier compensation regulations:

- (1) Intercarrier compensation regulation should promote *economic efficiency*. Consistent with how this term is generally defined in economic theory, this means that intercarrier compensation arrangements should send the right price signals to economic agents about the true economic and social costs associated with decisions regarding interconnection. Economic efficiency also requires that intercarrier compensation regulation lead to efficient retail/end-user pricing and an efficient use of networks.
- (2) Intercarrier carrier compensation regulation should be consistent with the *promotion of competition*.²³ This implies, among other things, that an intercarrier compensation regime be *competitively neutral*²⁴ and compensatory. The competitive neutrality requirement should also extend to the unbundled network element platform, the ILECs' UNE-P offerings. (Remarkably, the *NPRM* does not explicitly explore the impact of bill-and-keep proposals on the economic viability of the UNE-P offerings, offerings vital to the further development of competition.)
- (3) Intercarrier carrier compensation regulation should (a) maintain and promote *universal services*, and (b) be consistent with *just, reasonable and affordable end-user rates*.²⁵
- (4) Further, intercarrier compensation regulations should be *legal* both under the Telecommunications Act of 1996 and other provisions of federal law and the



²² The legitimacy of TELRIC has been questioned by the RBOCs and such organizations as the United States Telephone Association. Nevertheless, the TELRIC methodology has found wide acceptance and has been the guiding cost principle in virtually all UNE-cost proceedings.

²³ Any set of intercarrier compensation regulations should further the pro-competitive intent of the Telecommunications Act of 1996.

²⁴ Competitively neutral means that the intercarrier compensation regime neither favors nor disadvantages certain carriers.

²⁵ In general, intercarrier compensation regulations should be consistent with the universal service principles identified in Section 254 of the Telecommunications Act of 1996.

United States Constitution.²⁶

(5) Intercarrier compensation regulation should lead to *regulatory stability and consistency* in the application of regulatory principles, such as TELRIC-based rates. While this objective might be listed under the promotion of competition, it is sufficiently important to be identified individually. Intercarrier compensation should be consistent across *all forms* of intercarrier compensation and regulatory proceedings that critically depend on costs concepts.

As noted, OPUCT believes that the aforementioned objectives are best satisfied by means of a *unified intercarrier compensation* regime that is TELRIC based.

B. The Proposals for Mandatory Bill and Keep Will Hurt the Preservation and Promotion of Universal Service

The preservation and promotion of universal service is potentially hurt by the FCC's proposals in a number of ways. As recognized in the *NPRM*, a result of departing from CPNP and adopting bill and keep for intercarrier compensation – for both local and long distance access traffic -- is that the costs of terminating traffic (incoming calls) must now be recovered from the called party. In simplest of terms, this means that rates for basic local service may have to go up. (If bill and keep is adopted for local traffic only, then tariff arbitrage may cause a serious erosion of access revenues, again putting upward pressure on rates for local service.) For a number of reasons, OPUCT believes that such increases are undesirable and not in the public interest.

²⁶ While this observation would seem obvious, as will be discussed at some length below, OPUCT has special concerns about the FCC's proposed bill-and-keep arrangements. Specifically, OPUCT believes that bill and keep is both inappropriate and illegal when traffic is not in balance.

First, a policy that increases local subscription rates – without a demonstration that LEC costs have gone up – is at odds with the federal and state universal service objectives. Section 254 of the Telecommunications Act of 1996 identifies a number of significant universal service policies. For purposes of the current discussion, the most important ones may be stated as follows:

- 1. Quality services should be available at *just, reasonable, and affordable rates*.
- 2. Access to advanced telecommunications and information services *at just, reasonable, and affordable rates* -- should be provided in all regions of the nation.
- 3. Consumers in all regions of the nation -- including low-income consumers and those in rural, insular, and high-cost areas -- should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services. Further, these services should be offered at rates and in quality comparable to what is offered in urban areas.
- 4. All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.
- 5. Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services at just, reasonable, and affordable rates.

Because there will be upward pressure on local rates, each of the above principles is jeopardized by the FCC's bill-and-keep proposals.

Further, adding insult to injury, under the FCC's bill-and-keep proposals, end-users will pay for all incoming calls, whether they want those calls or not. They will pay for calls from telephone solicitors, such as banks, peddling lines of credit and mortgages, long distance companies, and various other companies that try to sell their wares by phone. Moreover, these

activities will be greatly stimulated, as under bill and keep, it is cheaper to engage in telephone soliciting. Further, end-users will pay for other unwanted and harassing calls, such as those from ex-spouses, crank-callers, stalkers, etc.

Technology will not solve this problem. Caller ID is partially helpful but does not resolve the problem entirely. Caller ID fails to identify all unwanted callers and since some unidentified callers represent calls end-users do want to answer, end-users may inadvertently find themselves answering unwanted calls. Further, answering machines and voice-mail do not screen out all unwanted calls either. Once the answering machine or voice-mail picks the call up, the costs have been incurred and payment is due.

Moreover, Caller ID is not inexpensive. Thus, in addition to having to incur costs of incoming calls, end-users who want to protect themselves from incurring charges for unwanted calls have to incur the cost of Caller ID instead. Again, end-users will face higher charges one way or another. All these increases in telephone charges are at directly odds with federal and state universal service objectives.

Third, the FCC should note that its proposals would bring about a significant change in *calling etiquette*. Most people are aware that when they make calls, to loved ones or others, that they are infringing on those people's privacy. Now, people also have to be aware that they may be imposing a cost on those they call. For example, when grandchildren call their grandparents, they would cause the grandparents incur telephone charges. While for some grandparents this may not be a problem, for others it may be and grandchildren may possibly call less frequently.

This is but one example of how a change away from CPNP will bring about a change in calling etiquette and calling patterns. While this issue is obviously complex and changes in calling patterns will be highly individualistic, it appears to OPUCT that for the most part the change will not be in the public interest. It neither seems polite nor socially desirable to impose telephone charges on people one calls. *Indeed, it would feel like sending a letter by mail with postage due.*Most people would find this embarrassing – except of course those who are peddling their wares.

Some of the problems related to end-users paying for unwanted incoming calls are alleviated by establishing flat monthly charges. However, since not all users have the same volume of incoming calls, flat monthly charges almost certainly will create *cross-subsidies* from low volume end-users to high volume end-users. OPUCT is most concerned about the possibility that low volume residential end-users, who receive few incoming calls, would end up cross-subsidizing certain high volume business end-users, who receive large volumes of incoming calls. *This type of cross-subsidy would be totally inappropriate and run contrary to federal and state universal service objectives*.

C. Mandatory Bill and Keep in the Presence of Traffic Sensitive Costs Is Without Regulatory Precedent

To motivate its proposed departure from CPNP, the FCC provides a number of observations: certain ILECs have proposed bill-and-keep arrangements for certain classes of

traffic²⁷; large Internet backbone providers often enter into peering arrangements that are based on bill and keep²⁸; OPP working papers discussed in the *NPRM* have suggested justifications for bill-and-keep arrangements²⁹; bill-and-keep proposals may be seen as following the precedent of the Commission's 1980 *Computer II* decision that deregulated CPE.³⁰ None of these observations is particularly convincing.

Traditionally, ILECs with adjacent service areas have had bill-and-keep arrangements for local traffic. Almost always, however, this involved situations where traffic was reasonably balanced. The ILEC proposals for bill and keep referenced by the FCC in the *NPRM* involve situations where traffic is *not* in balance. This changes matters considerably. To be sure, the fact that ILECs have proposed bill and keep for ISP-bound traffic demonstrates only the ILECs' distaste for making payments to competitors: it in no way demonstrates the validity of bill and keep when traffic is grossly out of balance. By contrast, traffic and compensation flows between ILECs and CMRS providers are traditionally out of balance but have run and continue to run in favor of the ILECs:³¹ ILECs have yet to propose bill and keep for wireless compensation. In other words, the ILECs' proposals for bill and keep with CLECs must be seen as an

²⁷ *NPRM* paragraph 43.

²⁸ *NPRM* paragraph 43.

²⁹ NPRM paragraph 43.

³⁰ *NPRM* paragraph 41.

³¹ In Texas alone, SWBT earned over \$200,000,000 in intercarrier compensation from wireless carriers, a number far greater than the amount paid to CLECs for ISP-bound traffic. See, *Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996*, Public Utility Commission of Texas, Docket No. 21982. Taylor Post-Hearing Brief, page 14.

opportunistic response to a situation where bill and keep reduces their payments to CLECs.

Second, the observation that peering arrangements between Internet backbone providers involve bill and keep is not relevant to the cost issues at hand. Intercarrier compensation for terminating traffic involves mostly the traffic sensitive ("TS") costs of terminating such traffic. The peering arrangements between Internet backbone providers involve mostly packet switched and not circuit switched traffic and, therefore, there are little if any TS costs. As such, the observations about peering arrangements is of little relevance to the question of how to recover the mostly TS costs of terminating traffic. Further, the peering arrangements between Internet backbone providers are not universally on a bill-and-keep basis. And, even for those peering arrangements that do use bill and keep, it is bill and keep only for certain participating carriers: others still have to pay.

Third, many of the advantages listed by the OPP papers (DeGraba and Atkinson-Barnekov), appear to suffer from the same misconceptions about the type of costs that are generally recovered for terminating traffic. For example, the FCC cites the Atkinson-Barnekov paper as claiming that a bill-and-keep regime may solve the problem of common cost allocation and introduce a more appropriate view of cost causation.³² *It does not*.

Common cost allocation, by definition, concerns the allocation of non-traffic sensitive ("NTS") costs. Since intercarrier compensation for terminating traffic is based almost

³² NPRM paragraph 39.

exclusively on TS costs, a move to bill and keep leaves this issue largely unaffected. For example, mandating bill and keep has no impact on how the common cost of the local loop is allocated -- reciprocal compensation charges never include any loop costs in the first place.

As for the narrow question of cost causation in telephony, there is merit in observing that the called party does have some cost responsibility by partaking in a telephone call. Clearly, if the called party decides not to answer the phone, certain costs – typically called call duration, or per MOU costs³³ -- will never come into existence. *As such, the called party can be referred to as an "accomplice" in the cost causation process.* This observation, however, pertains only to the TS costs of a call and falls well short of concluding that there is an equal and joint cost recovery responsibility that justifies a bill-and-keep regime.

According to economic literature, where it concerns a joint cost – as may be the case here –- costs can be assigned in a convex combination between the activities/products/services that cause the joint costs to come into existence.³⁴ This means that under standard economic theory, the joint costs of a telephone call can be assigned to the calling party and the called party in the proportion of (x) and (1-x), where x ranges from x to x. It is important to note that under economic theory, any value of x is equally arbitrary. Under the FCC's bill-and-keep proposals,

³³ Typically, in cost studies, certain costs of telephone calls, such as local switching costs, are bifurcated into call duration and call setup costs.

³⁴ See, for example, Daniel F. Spulber, *Regulation and Markets*, MIT Press, 1989, pp. 127-131.

the value of x is arbitrarily set at $\frac{1}{2}$. Under CPNP, the value of x is arbitrarily set at 1. (Under calling involving 800 numbers, the value is set at 0, i.e., the called party assumes 100 percent of the cost of the call.) Viewed from a narrow economic cost perspective -- and in the absence of other considerations -- there is no reason to prefer one value of x over another. However, good public policy is not made on the basis of narrow economic considerations. OPUCT believes that if a broad array of other considerations are brought to bear on the analysis, then a TELRIC based intercarrier compensation regime will be demonstrably superior to bill-and-keep regimes.

Further, it should be recognized that the called party is already shouldering a significant portion of the cost burden simply by paying the monthly subscription fee for telephone service, which in general, pays for the local loop facilities and a portion of the local switch (and associated overhead costs.)

OPUCT believes that, in the final analysis, the traditional view of cost causation - i.e., the calling party is the cost causer - leads to the most workable and appropriate intercarrier compensation regime.

Last, the notion that "bill-and-keep proposals may be seen as following the precedent of the Commission's 1980 *Computer II* decision that deregulated CPE" (customer premises

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³⁵ Under COBAC and BASICS, the originating carrier and the terminating carrier generally split the cost of the call evenly, with the originating carrier recovering the costs of originating the call and the terminating carrier recovering the costs of terminating the call. As such, it can be said that each carrier recovers approximately half of the costs of a call.

equipment) is not relevant either. Owners of CPE do not receive compensation for traffic that terminates on their equipment. That much is true. However, for traffic that originates at the CPE and traverses the public switched network, to terminate in the local exchange or elsewhere as long distance traffic, there most certainly are usage charges: the owner of the CPE (i.e., the enduser caller) is either assessed explicit usage charges or usage charges are included in a flat monthly subscription charge. Also, the costs for the local service connections, such as the basic voice grade local loop and the Direct Inward Dial and Direct Outward Dial trunks for PBXs, are not shared between the CPE owner and the ILEC, as they would be under a bill-and-keep arrangement. In short, there is no bill-and-keep arrangement with respect to CPE, as mistakenly implied by the statement that there is a "zero interconnection rate for CPE," and the deregulation of CPE under the Commission's 1980 *Computer II* decision is no precedent.

In sum, none of the FCC's observations appear to justify a radical move from CPNP toward mandatory bill and keep.

D. A Market-Based Approach to Reduce ILEC Payments for ISP-bound Traffic Would Be Far Better Than a Mandatory Bill-and-Keep Approach

As noted, the *NPRM* is largely motivated by one narrow issue: ILEC payments to CLECs for ISP-bound traffic. In the words of the FCC: "the concerns motivating this *NPRM* primarily stem from certain wireline interconnection situations, *particularly those involving LEC-ISP*

interconnection."³⁶ (Emphasis added.) It is clear from the *NPRM* and the *ISP Intercarrier Compensation Order* that the FCC views the reciprocal compensation payments by ILECs to CLECs as a significant problem. As the FCC notes in the *ISP Intercarrier Compensation Order*:

We recognize that the existing intercarrier compensation mechanism for delivery of this traffic, in which the originating carrier pays the carrier that serves the ISP, has created opportunities for regulatory arbitrage and distorted the incentives related to competitive entry into the local exchange and exchange access markets.³⁷

The FCC then goes on to note that

[C]ompetitive local exchange carriers (CLECs), on average, terminate eighteen times more traffic than they originate, resulting in annual CLEC reciprocal compensation billings of approximately two billion dollars, ninety percent of which is for ISP-bound traffic.³⁸

In response to these perceived market distortions, the FCC has decided to intervene on behalf of the ILECs and to reduce the reciprocal compensation payments by regulatory mandate. The response of the FCC to this issue, in the *ISP Intercarrier Compensation Order* and *NPRM*, has been most unfortunate.

First and foremost, if the ILECs are troubled by the increasing flow of reciprocal compensation payments to CLECs, they could start to compete for ISPs. The ILECs still enjoy all the benefits of incumbency and there is no reason why they could not retain or win back ISPs. The truth is that the ILECs are simply not interested in serving ISPs. To the contrary, the ILECs

³⁶ NPRM, paragraph 65. The same thought is expressed in, for example, paragraph 24.

³⁷ Intercarrier Compensation for ISP-Bound Traffic Order, paragraph 2.

have consistently been at war with ISPs and when given the opportunity will discriminate against this class of customers.³⁹ The ILECs' unwillingness to serve ISPs is perhaps best illustrate by the following quote from a brief filed by the Texas Internet Service Provider Association ("TISPA") in a Texas proceeding:

ISPs have been fortunate that competitive carriers have sought to provide service to them – at reasonable prices and terms. SWBT never competed for service to ISPs; rather, the ILEC has been *hostile, unyielding, and antagonistic*. SWBT has refused to provide PRI service to ISPs in many areas, despite Commission rules requiring statewide availability. SWBT favors the SBC Internet affiliate in numerous ways, for dial-up and DSL service. SWBT has constantly sought to leverage its continued dominance in the local market into a large share of the enhanced services market and has actively done everything it can to harm ISPs.⁴⁰ At every turn, ISPs throughout the state have discovered that SWBT perceives them to be competitors; a group that must be driven from business, and certainly not deserving of high-quality, reliable and affordable local service.⁴¹

It is no wonder that ISPs prefer to be served by CLECs. The reciprocal compensation payments from the ILECs to the CLECs for ISP-bound traffic, therefore, reflect not market failure – as the FCC and the ILECs would have it – but normally functioning market forces: customers select providers that serve them best.

(Continued from previous page)

³⁸ Id., paragraph 5.

³⁹ In California, a group of ISPs plans to file a complaint with the California Commission, accusing Pacific Bell and an affiliate of engaging in anti-competitive practices. "Pacific Bell May Face Complaint," *The New York Times*, July 26, 2001, page C1.

TISPA documented the numerous "bad acts" SWBT has committed against ISPs in comments to the FCC in SBC's § 271 case. *See*, TISPA Reply Comments in CC Docket 00-04.

⁴¹ Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 3.

There should be little doubt that if ILECs had been able to control the growth of the Internet as well as access to it, then there would not have been an independent ISP industry. All large ILECs offer their own Internet services in competition with the independent ISPs, and, as with other would-be competitors such as CLECs, this means that ILECs at every opportunity will seek to handicap them in their operations. These accusations sound harsh, but even a cursory review of telecommunications history provides ample support.

An important example of the ILECs' unwillingness to offer quality service to ISPs concerns collocation. As the FCC knows, ISPs are most efficiently served when they are collocated in the central office. One reason is that ISPs need to verify a customer's account before they provide Internet access; the look-up function is most easily performed if the customer database and computer equipment is collocated in the central office, as it eliminates the need for transport to a remote location. *In spite of these obvious benefits of collocation to ISPs, ILECs have yet to allow ISPs to efficiently collocate.*⁴²

Further, ISPs are often served through ISDN services. Traditionally, however, ILECs have over-priced their ISDN services in order to avoid migration of business customers away from basic business lines to more efficient ISDN lines.⁴³ As a result, ISPs face unnecessarily

⁴² Of course, in spite of regulators best efforts, virtually all collocation arrangements that ILECs do offer are required by regulation but remain excessively expensive.

⁴³ While such a migration might be beneficial to business users and society, it is not to the ILECs, since it reduces their profit margins.

expensive ISDN lines.44

Most ILECs have the ability to offer individual case base ("ICB") pricing to specific customers. Under ICB pricing, ILECs are able to offer service at lower prices in demonstrably competitive situations. OPUCT is not aware of any instance in which ILECs have requested or used ICB pricing to attract or retain ISPs.

Last, it is well documented that ILECs have been remiss in provisioning ISPs with services in a timely fashion.⁴⁵ Given that most ISPs have experienced exponential growth, timely responses to service order requests are of critical importance.

The conclusion is inescapable: ILECs have never sought to compete for ISPs. It is no surprise, therefore, that ISPs have flocked to CLECs. CLECs have welcomed ISPs and provided them with all the services and responsiveness they did not receive from ILECs. CLECs provided ISPs with efficient collocation arrangements, affordable ISDN services, and timely responses to service request.

⁴⁴ Since ISDN services are tariffed, ISPs pay no more than other customers

⁴⁵ For example, TISPA notes the following: "SWBT and the other ILECs have a miserable record on service to ISPs, according to a recent survey. ... A copy of the survey is attached. The results make it clear that *ISPs use CLECs because they were chased away by the ILECs*. The Commission must allow local competition to work; SWBT's problem is that it did work. The Internet is what it is today in large part because ISPs were able to find providers that valued them as customers and did not constantly attempt to drive them out of business." Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 3, footnote 2.

As noted, the FCC views the reciprocal compensation payments for ISP-bound traffic as a sign of market failure. For example, the FCC appears concerned about the notion that CLECs "terminate eighteen times more traffic than they originate." OPUCT believes that the FCC's concerns are unfounded.

OPUCT has already explained that the unbalanced traffic flows are a natural result of the fact that ILECs actively shun ISPs: since ISPs have almost exclusively incoming traffic, traffic flows will be out of balance. Further, the fact that traffic is out of balance is immaterial. For years, traffic flows between CMRS providers and ILECs have been out of balance, particularly in the early years of the wireless industry. Neither the FCC nor the ILECs have ever considered this to be a serious problem or a sign of market failure. It surely has never prompted the FCC or the ILECs to advocate imposing bill and keep so as to reduce the payments from CMRS providers to ILECs. The truth is, there is nothing fundamentally wrong with unbalanced traffic flows, or even with one-way networks.

The FCC also appears concerned about the fact that reciprocal compensation payments from ILECs to CLECs may approximate two billion dollars annually, most of which is compensation for ISP-bound traffic. OPUCT again believes that the FCC's concerns are unfounded.

First, ILECs are perfectly capable of competing for ISPs and altering the traffic flows; as

⁴⁶ Intercarrier Compensation for ISP-Bound Traffic Order, paragraph 5.

discussed, ILECs are simply not interested in doing so.⁴⁷ More importantly, however, there is no reason to believe that (1) the ILECs are hurt by paying CLECs for terminating ISP-bound traffic, and (2) CLECs are being overcompensated.

As long as reciprocal compensation rates are TELRIC based, the ILECs are paying reciprocal compensation charges based on how much it would costs them to terminate traffic. This means that if ILECs pay CLECs two billion dollars annually for terminating traffic, they must save approximately the same amount of money in expenses from not having to terminate the traffic themselves. That is, as long as reciprocal compensation charges are based on the ILECs' TELRIC for terminating traffic, by definition, the ILECs should be *indifferent* between having the CLECs terminate that traffic or terminating it themselves. Again, the observation that ILECs pay CLECs two billion dollars annually to terminate traffic is fairly meaningless – surely, it is no argument for arbitrarily reducing those payments.

Further, there is little or no reason to believe that CLECs are being overcompensated when they receive two billion dollars in reciprocal compensation payments. The reciprocal compensation payments are based on the ILECs' cost for terminating traffic. All indications are that the CLECs' costs for terminating traffic are higher. As a matter of common sense, the CLECs are for the most part start-up operations that cannot possibly achieve the economies of scale enjoyed by the ILECs. In fact, the FCC itself has noted this on various occasions. Most

⁴⁷ There is evidence that most ILECs have contingency plans for winning back ISPs. These plans never had to be fully activated, however, since for the most part regulators have accommodated the ILECs on reciprocal compensation issues.

notably, in its *UNE Remand Order*, ⁴⁸ the FCC found the following:

The average cost of providing service to customers decreases as the number of customers served increases. As a general rule, we find that scale economies are more pronounced when switches operate at full utilization. Because incumbent LEC switches serve the majority of customers for local exchange service, they are likely to be able to take advantage of substantially greater economies of scale than the competitor would using its own switches.

The FCC then went on to note:

We find, as a general matter, that the total costs of self-provisioning a switch impose on the requesting carrier a significant cost disadvantage relative to the incumbent LEC, particularly in its early stages of entry.⁴⁹

Thus, the FCC itself has found that CLECs generally speaking will have higher switching costs than ILECs. This means that if CLECs are compensated based on the ILECs' costs of terminating traffic, then most likely they are being under-compensated relative to their own costs. In sum, all indications are that when ILECs pay CLECs two billion dollars annually for terminating traffic, the CLECs are being under-compensated rather than over-compensated.

From society's perspective it may be optimal to have CLECs terminate ISP-bound traffic. The Commission should consider that since most CLECs are start-up operations and often have significant amounts of spare switching capacity; it would be economically efficient to use this spare capacity for terminating fast growing ISP-bound traffic. By contrast, since ILECs are

⁴⁸ Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order, (1999) ("UNE Remand Order"), paragraph 258.

⁴⁹ Id., paragraph 259.

operating mature networks, it is entirely possible that fast-growing ISP-bound traffic may cause them to expand their facilities. From society's perspective, therefore, it is optimal to have the CLECs use their spare switching capacity to accommodate this fast-growing traffic. Moreover, as long as reciprocal compensation rates are set at TELRIC, the ILECs receive the correct price signals for whether it is more efficient to terminate ISP-bound traffic themselves or to "outsource" the call termination functionality to CLECs.⁵⁰

In short, the traffic imbalances between ILECs and CLECs for ISP-bound traffic do not constitute market failure. To the contrary, the traffic flows are the result of normal market forces and as long as reciprocal compensation is TELRIC based, economic welfare is maximized.

Unfortunately, the FCC has interrupted these market dynamics and used its regulatory powers to reduce the payments from ILECs to CLECs in a rather ad hoc fashion. In its *ISP Intercarrier Compensation Order*, the FCC adopted a sliding scale for compensation to carriers for ISP-bound traffic. The highest rate of compensation permissible will be \$.0015/minute-of-use ("MOU"). Over time, this rate cap is reduced to \$.0007/MOU. Furthermore, the FCC imposed a cap on the number of MOUs on which a carrier may receive compensation. A review of the *ISP Intercarrier Compensation Order* reveals, however, that these recommendations lack any serious foundation in cost considerations. The FCC is now contemplating taking its intervention even further and mandating bill and keep, irrespective of traffic flows. This means,

⁵⁰ When a CLEC serves the ISP, it is the CLEC that performs the call termination functionality for ISP-bound traffic that originated on the ILEC's network. If the ILEC believes that the CLEC is charging too much for the call termination functionality, the ILEC can win back the ISP to self provide the call termination functionality.

among other consequences, that CLECs would receive no compensation at all for ISP-bound traffic.

The undesirable outcomes of the FCC's approach in the *ISP Intercarrier Compensation Order* and the current *NPRM* cannot be overstated. First, since the reciprocal compensation payments have grown to approximately two billion dollars annually, CLECs that serve ISPs will see a radical reduction in revenues. If the FCC follows through on its proposal to impose bill and keep on all traffic between carriers, the revenue impact will be even more dramatic. Not only will all reciprocal compensation revenues disappear, but some or all of the switched access revenues may disappear as well.

In the *ISP Intercarrier Compensation Order*, the FCC notes that its declining rates reflect a downward trend in intercarrier compensation rates in recently negotiated agreements "suggesting that they are sufficient to provide a reasonable transition from dependence on intercarrier payments *while ensuring cost recovery*." (Emphasis added.) The FCC's claim that its adopted rates ensure cost recovery is at odds with any cost data and financial statistics that OPUCT has seen. There were few, if any, profitable CLECs before the FCC and state commissions started to reduce compensation for ISP-bound traffic. It is difficult to see, therefore, how eliminating no less than two billion dollars of annual revenues from an industry that is already in a state of meltdown is "ensuring cost recovery."

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⁵¹ ISP Intercarrier Compensation Order, paragraph 8.

Further, as a result of the FCC's accommodations, ILECs will never have to make the hard choice between continuing to pay reciprocal compensation for growing volumes of ISP-bound traffic *or* beginning to compete for ISPs. By contrast, if ILECs were forced to compete for ISPs there would be, at a minimum, four positive results:

- 1. Since collocation is critically important to ISPs, ILECs would have to offer efficient collocation arrangements to ISPs. Given the non-discrimination provisions in the Telecommunications Act of 1996, ILECs would have to extend similar arrangements to CLECs. The benefits to competition of efficient collocation would be very significant.
- 2. If ILECs had to compete for ISPs, they would be induced to reveal their true costs, as they did before the FCC issued its *ISP Intercarrier Compensation Order*. In an effort to control burgeoning reciprocal compensation payments, ILECs were increasingly forced to reveal the real cost of certain network elements. We have learned, for example, that local switching does not costs between \$0.004 and \$0.002 per MOU, as presumed by the FCC in paragraph 811 of the Local Competition Order, but significantly less.⁵²
- 3. ILECs would have an added incentive to lower the artificially high prices for ISDN services.
- 4. ISPs and users of their services would experience the benefits of competition, consistent with the importance of ISPs in providing affordable Internet access to ordinary ratepayers.⁵³

OPUCT believes that the FCC's polices, expressed in the *ISP Intercarrier Compensation*Order and the NPRM, now threaten to extend the ILECs' telephone monopoly to access to the

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⁵² For example, in New York, the per MOU rates for terminating local switching for Zones 1a, 1b, and 2 are \$0.000982, \$0.000813, and \$0.00157, respectively. See Recommended Decision, May 16, 2001, NYPSC Case 98-C-1357, proceeding on Motion of the Commission to Examine New York Telephone company Rates for Unbundled Network Elements. In Texas under the local switching rates for levels 1 through 4 are \$0.0021, \$0.0011, \$0.0012, and \$0.0014, respectively. See PUCT Docket 122199, T2a. In Massachusetts, Verizon itself just recently proposed local switching termination rates of only \$0.00105 per MOU. See Verizon Direct Testimony, Massachusetts D.T.E. 01-20 UNE/Resale Proceeding. May 4, 2001.

⁵³ According to The Yankee Group, almost 90% of the estimated 63.5 million residential Internet users still use ordinary dial-up services. See "Digitally Disenfranchised," *The New York Times*, August 6, 2001, page C1.

Internet. While there are alternative means of accessing the Internet, such as cable and wireless connections, the ILECs' control over ubiquitous local loop facilities position them to be the dominant Internet access providers. The confluence of the ILECs' market power and stated preference for measured Internet service and the FCC's intent to have carriers recoup the cost of incoming calls from their own end-users may cause ILECs to propose *measured*, *usage based Internet access*. For example, SBC's preferred position on Internet traffic is to treat it as traditional long distance traffic:

ISPs are access service customer. ISPs, *like long distance carriers*, sell a service to their subscribers that depends upon ISPs having access to the 'last mile' of the local telephone network to complete interstate – indeed often *global* – communications links. ... *ISPs should pay* ... the costs of access ... just as IXCs do. (Emphasis added.)⁵⁴

This trend toward measured Internet access is dangerous and poses a threat to the interests of residential and small business customers and, indeed, the nation at large.

In sum, the FCC's policies regarding ISP-bound traffic do not bode well for customers, the ISP industry, or the CLEC industry. The FCC should note that even though the issues raised in the *NPRM* are vitally important to ISPs, the ISP industry is in such bad shape that an organization such as Texas Internet Service Providers Association ("TISPA") is not filing comments for lack of resources. The absence of TISPA in this proceeding is amazing, given that these proceedings may mark the end of the independent ISP industry. As TISPA notes, in a Texas proceeding on intercarrier compensation for ISP-bound traffic, "[s]everal TISPA members

⁵⁴SWBT's Response to Taylor Communications group, Inc.'s Petition for Arbitration, Texas Public utility Commission, Docket No. 21982, page 7.

have been advised by their CLEC providers that they may choose to no longer provide service to ISP customers if SWBT wins.⁵⁵" SWBT's policy recommendation in that proceeding was: *bill* and keep for ISP-bound traffic. As discussed below, the CLEC industry is in equally bad shape. Adding yet another regulatory shock would be very untimely. Indeed, one may cynically note that a few more regulatory shocks and the issue of compensation between competing carriers for intercarrier traffic will be permanently resolved – there won't be any such traffic.

E. The Proposals for Mandatory Bill and Keep Would Create a Host of Arbitrage Opportunities while Cost-based rates Promote Regulatory Efficiency

Potential for arbitrage always looms large when regulators approve tariff provisions that are not cost based. While OPUCT understands the FCC's arguments that bill-and-keep proposals represent a shift in paradigm away from the implied cost causation of the CPNP paradigm, the fact remains that under bill and keep, carriers can terminate on one another's networks for free. No matter how one phrases this issue, entrepreneurs will see this as an open invitation to test their profit spotting abilities.

Under the FCC's proposals, the most obvious form of arbitrage will involve the termination of long distance voice traffic, IP based or traditional, over local interconnection

⁵⁵ Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 5.

trunks. The arbitrage opportunity here is a variant of the longstanding "leaky PBX," except that with voice over IP traffic, and the presence of CLECs, the potential disruptions are far greater. Surely, other forms of arbitrage are being contemplated as a result of this *NPRM*, but will become manifest only after the fact: *i.e.*, after the Commission has committed the industry to mandatory bill and keep. Given that arbitrage is a way for markets to ferret out irrational differences between tariffs, OPUCT believes that eventually the Commission would be forced to revert to a unified regime of cost-based rates.

Further exacerbating the potential arbitrage problems are the complex *jurisdictional* aspects of the FCC's proposals. Traditionally, states have jurisdiction over rates for intrastate services. Thus, if the FCC decides that mandatory bill and keep is a preferred paradigm for intercarrier compensation, it is not clear that the FCC will be able to convince the states. In fact, given that the FCC's proposed polices will put upward pressure on local rates, it is quite unlikely that they will. Again, the result of state and federal agencies following different policies could be to move the industry further away from a unified regime, thus exacerbating problems with tariff arbitrage rather than solving them.

By contrast, a unified regime of TELRIC-based rates and an emphasis on competition will increase the efficiency of regulation and reduce the role of regulators. Most, if not all, commissions have examined TELRIC studies as part of UNE-cost and USF proceedings. The FCC has also a fair amount of accumulated knowledge of TELRIC studies. Based on this cumulative knowledge of TELRIC studies, acquired since the passage of the Telecommunications Act of 1996, a unified regime can be established that applies across all

regulatory proceedings and intercarrier transactions without much additional effort.

Further, OPUCT has already discussed how a TELRIC based compensation regime together with an emphasis on competition and market-based solutions will not only resolve the issues concerning compensation for ISP-bound traffic but a number of other longstanding issues as well. Most notably, as discussed in the previous section, this approach will resolve issues concerning the ILECs' terms and conditions for collocation arrangements. Again, under a market-based approach, ILECs would have a strong incentive to offer efficient collocation arrangements -- not because of a regulatory mandate but because it allows them to compete more effectively for ISPs. The benefits here cannot be overstated.

As the FCC knows, collocation is an essential first step in creating vibrant facilities-based competition. It is through collocation that CLECs gain access to UNEs necessary to allow them to provide services over a mix of their own facilities and unbundled elements, provided by the ILEC. Without reasonable collocation terms and conditions, there is little chance that facilities-based competition will endure.

The need for reasonable collocation terms and conditions has become all the more important with the advent of broadband service providers based on the ILECs' digital subscriber line technology (commonly referred to as xDSL), including ADSL (asymmetric digital subscriber line), HDSL (high-speed digital subscriber line), UDSL (universal digital subscriber line), VDSL (very-high speed digital subscriber line), and RADSL (rate-adaptive digital subscriber line), and services based on packet-switched technology.

In view of these developments, FCC has ordered ILECs to establish cageless and shared collocation to further facilitate interconnection with the ILECs and to reduce possible bottlenecks.⁵⁶ Additionally, in its August 9, 2000 *Advanced Services Order*, the FCC further stressed the importance of collocation to competition, particularly competition for advanced services, such as xDSL. ⁵⁷

Still, in spite of the best efforts of state and federal regulators, collocation tariffs remain prime examples of how ILECs are successful in erecting barriers to entry. For example, Verizon's ("VZ-MA's") proposed physical collocation tariff in Massachusetts⁵⁸ contains rates that are significantly higher than those of independent collocation providers, which may be viewed as providing a reasonable benchmark for market-based, competitive rates. Independent physical collocation providers, sometimes referred to as collocation hotels, provide collocation to a large variety of telecommunications entities, such as IXCs, CLECs, high capacity access providers, ISPs, etc., and serve as a sort of telecommunications hub where these entities can

⁵⁶ In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, First Report and Order and Further notice of Proposed Rulemaking, para. 2,3,4(rel. March 31, 1999) ("Advanced Services Order").

⁵⁷ In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 98-147 & CC Docket No. 96-98, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, para 10 (rel. August 10, 2000).

⁵⁸ In the Matter of Investigation by the Department on its Own Motion Into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England Inc., d/b/a Verizon Massachusetts' Resale Services, Commonwealth of Massachusetts Department of Telecommunications and Energy, D.T.E. 01-02, Verizon Testimony of Dinell Clark, May 4, 2001.

interconnect. The collocation hotel simply provides the space, power, and other services – comparable to the ILECs' -- for these entities to place their facilities and interconnect.

For an illustrative collocation arrangement,⁵⁹ VZ-MA's rates and those of an independent collocation provider are as follows:

Comparison of Monopoly and Competitive Collocation Charges

	Non-Recurring	Recurring
	Charges	Charges
VZ-MA Physical Collocation	\$24,258.67	\$3,369.77
Independent Collocation Provider	\$3,250.00	\$2,350.00

The rates charged by the collocation hotel are for a one-year commitment.⁶⁰ For longer-term commitments, more favorable rates apply. As is clear from the above table, VZ-MA charges CLECs more than *seven times* as much to move into a collocation space than the collocation hotel. The differential reflects the significant barrier to entry that VZ-MA's NRCs constitute. VZ-MA's recurring charges are higher as well.

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⁵⁹ The comparison is performed for 100 square feet of floor space and for a sample combination of DS0, DS1 and DS3 circuits that is consistent with an efficient utilization of that 100 square feet of space. The space will have a fiber feed from the ILEC cable entrance facility to the cage. The fiber feed consists of twelve working fibers. The comparison assumes that the collocator orders 2000 DSO circuits, 84 DS1 and 24 DS3 circuits. Associated with this space and these circuits, the collocator needs 100 amps of DC power, one twenty-amp AC circuit and lighting for the work area.

⁶⁰ In the Matter of Investigation by the Department on its own Motion Into the Appropriate Pricing, based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England Inc., d/b/a Verizon Massachusetts' Resale Services, Commonwealth of Massachusetts Department of Telecommunications and Energy, D.T.E. 01-02, Rebuttal testimony of Sidney L. Morrison, on behalf of CLEC Coalition, July 17, 2001. The rates are based on a quote from Universal Access, an independent collocation provider in Boston. See: www.universalaccess.net.

This comparison illustrates to the FCC that -- all its efforts notwithstanding – the ILECs' collocation rates remain a significant barrier to entry, successfully erected to handicap would-be competitors.

The purpose here is to show the FCC how much more efficient a market-based approach -- rather than its ad hoc regulatory approach - would be in dealing with issues of intercarrier compensation for ISP-bound traffic. Again, swelling reciprocal compensation payments for ISP-bound traffic would force ILECs to compete for ISPs. This in turn would force them to offer efficient collocation arrangements to ISPs. Under the non-discrimination clauses of the Telecommunications Act of 1996 and various state statutes, these arrangements would automatically be available to CLECs as well. In sum, a TELRIC based intercarrier compensation regime and an emphasis on market-based solutions would resolve the longstanding problems with the ILECs' collocation tariffs -- and resolve them in a manner far more efficient and satisfactory than regulators could.

The same holds for issues concerning the true costs of local switching, which underlie both reciprocal compensation and unbundled local switching rates. As discussed previously, it is only after ILECs were making significant reciprocal compensation payments based on the same local switching costs used to set rates for UNE services that ILECs revealed significantly lower switching costs than originally claimed. As discussed in the previous section, this incentive for ILECs to reveal their true costs has been largely lost as a result of the FCC's *ISP Intercarrier Compensation Order*. The effect still serves as a useful reminder, however, of how TELRIC-based rates and an emphasis on market-based solutions can enhance regulatory efficiency.

F. The CLEC Industry Is Weak and Requires Regulatory Stability

Given the general state of the CLEC industry and the significant uncertainty over the long-term viability of numerous CLECs, the FCC should take great care not to change the fundamentals of the industry. The FCC should recognize that when the Telecommunications Act of 1996 was passed and the FCC issued its Local Competition Order, certain ground rules were put in place. Based on those rules, entrepreneurs and financial markets committed vast resources to build competitive local networks. Given that to a large extent these investments represent sunk costs, it is counterproductive to implement changes in regulatory policies that dramatically change the ground rules for competitive entry and the prospects for profit so shortly afterwards.

With the benefit of hindsight, we can now judge the process of promoting local competition to be far more difficult than most policy makers anticipated. In fact, in view of recent developments, one might wonder if it is going to work at all. According to some, the entire competitive effort is a failure and the RBOCs have slowly but steadily out-maneuvered their would be competitors. A recent article in *The New York Times* declared that the battle is over:

Of the Baby Bell local phone carriers, once seven in number, three [sic] remain — Qwest Communications, SBC Communications and Verizon Communications — and they are by far the most powerful and important communications companies in the nation. The corporations once known as

long-distance carriers, like AT&T, are shells of their former selves. ... The Bells — the race's tortoises — have won.⁶¹

In yet another article on the demise of the competitive telecommunications industry, *Wired* notes:

The Bells own 88 percent of the local lines in the US and upgrade on their own terms – conveniently, after most of their competitors have died off.⁶²

Whatever may be the merit of these somber prognoses, the fact remains that the competitive telecommunications industry is struggling merely to survive. In the war of attrition, waged by the RBOCs against their competitors, in the market place, in the U.S. Congress, the courts, and before regulators, it does not bode well for the RBOCs' competitors: and, the financial community knows it.

Attached to these comments is an analysis that calculates the change in market value of the CLEC industry over the period of December 31, 1999 through April 23, 2001, based on the value of the common shares held by investors. For the IXC and CLEC industries the total decline in market capitalization over this period is a staggering \$405 billion, or 64%.⁶³ The data for just CLECs, excluding IXCs, is \$122 billion, or 69%. By contrast, the RBOCs experienced declines in market capitalization over the same period of \$79 billion, or only 16%, a percentage

Seth Schiesel, "Sitting Pretty: How Baby Bells May Conquer Their World." *The New York Times*, Money&Business, Section 3, page 1. Sunday, April 22, 2001.

Frank Rose, "Telechasm: Can we get to the future from here? First we have to get telecom out of the Stone Age." *Wired*, May 2001, page 131.

⁶³ Tables 2.2 through 2.4 of the attached study lists the CLECs, IXCs, and RBOCs for which the change in market capitalization has been calculated.

roughly comparable to the decline in the S&P 500 Index.

These data show that the CLEC industry is in no position to absorb a regulatory shock of the type contemplated in the NPRM. By the FCC's estimates, 64 the CLEC industry is about to forfeit about two billion dollars in annual intercarrier compensation payments. A large portion of the recent decline in CLEC market capitalization is undoubtedly due to these reductions in intercarrier compensation payments.⁶⁵ The FCC should realize that if it mandates bill and keep for all traffic exchanged between carriers, CLECs stand to lose yet more revenues. Specifically, CLECs will lose switched access revenues paid by IXCs, which typically constitute a significant portion of overall revenues. Given the general uncertainty surrounding the economic viability of the CLEC industry, mandating bill and keep would be particularly unwise.

G. Mandatory Bill and Keep Will Further Imperil the CLECs' Competitive Position and Undermine the UNE-platform Entry Strategy

As the FCC has recognized, under its bill-and-keep proposals carriers will have to recoup the costs of terminating traffic from their own end-users. To the extent that this will place upward pressure on end-user rates, the CLECs' competitive position relative to the ILECs' is also endangered.

⁶⁴ Intercarrier Compensation for ISP-Bound Traffic Order, paragraph 5.

The ILECs have a much greater ability then the CLECs to absorb the increases in enduser rates that the FCC's bill-and-keep proposals may cause. As a result of their large and
diverse customer base, ILECs will be able to strategically raise some rates while leaving other
rates relatively unaffected. That is, ILECs can selectively raise certain rates – *in regions or for*customer classes where competition is absent – and keep other rates – *in regions or for customer*classes where they do face competition -- relatively stable. By contrast, most CLECs have a far
smaller and more homogeneous customer base, *all of which is subject to competition*. That is,
the CLECs have no captive customers who are not subject to competition and whose rates they
can raise. The asymmetry favors the ILECs.

One might argue that this asymmetry in the ability of ILECs and CLECs to selectively raise or lower rates exists already and that the FCC's bill and keep proposals would not affect it one way or another. This argument misses the point. A mandatory bill and keep arrangement will provide ILECs with a justification to raise rates; as such, the FCC's policies would be the catalyst for a further erosion of the CLECs' already perilous competitive position.

Further, the FCC's bill-and-keep proposals may seriously undermine entry strategies that use the UNE platform. A CLEC that leases a UNE platform from an ILEC is currently entitled to both reciprocal compensation and switched access revenues, which CLECs need to offset the

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⁶⁵ If before the general decline in equity values, CLEC shares were trading at a price-earnings ratio of, say, 40, then a two billion dollar cut in revenues – and, hence, in profits – *could have caused a decline in CLEC market capitalization of no less than 80 billion dollars*.

charges from the ILEC for use of the ILEC's UNE platform. Under the FCC's proposals, both *revenue sources* would be significantly reduced or eliminated all together – there is no commensurate reduction, however, in *costs*. Thus, a consequence of the FCC's proposals is a serious narrowing of profit margins for CLECs that use the UNE platform. Since the majority of CLEC customers are served by means of UNE-platform products,⁶⁶ the FCC's proposals could seriously endanger the further development of competition.

H. There Is No Support in the Telecommunications Act of 1996 for the FCC's Proposals

Underlying bill-and-keep arrangements for local and ISP-bound traffic is the notion that carriers are compensated in kind. That is, under bill-and-keep, carriers decide to barter their call termination functionalities in approximately offsetting proportions. As Section 252(d)(2)(B)(i) of the Telecommunications Act of 1996 notes:

(B) RULES OF CONSTRUCTION.—

This paragraph shall not be construed-- (i) to preclude arrangements that afford the *mutual recovery of costs through the offsetting* of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements); (Emphasis added.)

It is important to note that the Telecommunications Act of 1996 speaks of "the mutual

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⁶⁶ According to Verizon, the vast majority of CLEC customers in New York are served by means of the UNE platform. See, Verizon New York, Initial Panel Testimony, *Proceeding on Motion of the Commission to Consider Cost Recovery by Verizon and to Investigate the Future Regulatory Framework*, Case 00-C-1945, May 15, 2001.

recovery of costs through the offsetting of reciprocal obligations." This process, by which carriers barter their call termination functionalities in approximately equal proportions is only possible if traffic is approximately in balance and if carriers have approximately the same cost structure. If traffic is significantly out of balance, then obviously the process of bartering call termination functionalities will leave one carrier significantly under-compensated.

With respect to long distance traffic, a bill-and-keep arrangement would leave a carrier entirely without compensation for both its originating and terminating traffic. As such, a bill-and-keep arrangement would run afoul of the takings clause of the Fifth Amendment to the United States Constitution.

I. Conclusion

OPUCT is troubled by the FCC's proposed bill-and-keep proposals. They seem to be narrowly tailored around a few perceived problems, such as the one-sided compensation payments for ISP-bound traffic, and to ignore the broader context of telecommunications policy, such as the of promotion of competition and universal service. To be sure, both competition and universal service will be imperiled under the FCC's mandatory bill-and-keep proposals.

OPUCT believes that in the long run society's interests are better served by a three pronged approach: TELRIC-based rates for all intercarrier wholesale transactions; vigorous promotion of competition; and efficient, adequate and competitively neutral universal service policies.

III. COMMENTS ON SPECIFIC PARAGRAPHS

In this section, OPUCT will provide comments on the issue addressed in specific paragraphs. Some of the comments in this section are duplicative of those discussed in the introductory section.

A. Appropriate Goals for Intercarrier Compensation Rules in Competitive Markets

NPRM Paragraph 33

What are the appropriate goals for intercarrier compensation regulations, and should efficiency be the primary goal?

OPUCT Comment:

Instead of the narrow objectives that motivate the bill-and-keep proposals, the FCC should consider the following broader goals for intercarrier compensation regulations:

- (1) Intercarrier compensation regulation should promote *economic efficiency*. Consistent with how this term is generally defined in economic theory, this means that intercarrier compensation arrangements should send the right price signals to economic agents about the true economic and social costs associated with decisions regarding interconnection. Economic efficiency also requires that intercarrier compensation regulation lead to efficient retail/end-user pricing and an efficient use of networks.
- (2) Intercarrier carrier compensation regulation should be consistent with the *promotion of competition*. ⁶⁷ This implies, among other things, that an intercarrier

⁶⁷ Any set of intercarrier compensation regulations should further the pro-competitive intent of the Telecommunications Act of 1996.

compensation regime be *competitively neutral*⁶⁸ and *compensatory*. The competitive neutrality requirement should also extend to the unbundled network element platform, the ILECs' UNE-P offerings. (Remarkably, the *NPRM* does not explicitly explore the impact of bill-and-keep proposals on the economic viability of the UNE-P offerings, offerings vital to the further development of competition.)

- (3) Intercarrier carrier compensation regulation should (a) maintain and promote *universal services*, and (b) be consistent with *just, reasonable and affordable end-user rates*.⁶⁹
- (4) Further, intercarrier compensation regulations should be *legal* both under the Telecommunications Act of 1996 and other provisions of federal law and the United States Constitution.⁷⁰
- (5) Intercarrier compensation regulation should lead to *regulatory stability and consistency* in the application of regulatory principles, such as TELRIC-based rates. While this objective might be listed under the promotion of competition, it is sufficiently important to be identified individually. Intercarrier compensation should be consistent across *all forms* of intercarrier compensation and regulatory proceedings that critically depend on costs concepts.

Further, the Commission seeks comment on whether an intercarrier compensation regime should be technologically neutral. OPUCT believes that no regime can be technologically neutral -- each regime will induce carriers to interconnect in a more or less specific manner. The objective is to select a regime that induces carriers to select a manner of interconnecting that optimizes social welfare, *considering all objectives of intercarrier compensation*.

 $^{^{68}}$ Competitively neutral means that the intercarrier compensation regime neither favors nor disadvantages certain carriers.

⁶⁹ In general, intercarrier compensation regulations should be consistent with the universal service principles identified in Section 254 of the Telecommunications Act of 1996.

⁷⁰ While this observation would seem obvious, as will be discussed at some length below, OPUCT has special concerns about the FCC's proposed bill-and-keep arrangements. Specifically, OPUCT believes that bill-and-keep is both inappropriate and illegal when traffic is not in balance.

As noted, OPUCT believes that the aforementioned objectives are best satisfied by means of a *unified intercarrier compensation* regime that is TELRIC based.

By contrast, the bill-and-keep regimes discussed in the *NPRM* – COBAK and BASICS -- satisfy these objectives only under select circumstances, such as when traffic is approximately balanced between carriers that incur costs in terminating traffic that are approximately equal. In most other circumstances, however, COBAK and BASICS will result in distortions and other undesirable results.

NPRM Paragraph 34

How much regulatory intervention is required to implement various interconnection regimes?

OPUCT Comment:

The primary objectives of intercarrier compensation should be those identified in our comments to *NPRM* paragraph 33. The degree of regulatory intervention should become a concern only if it appears that a regime is excessively burdensome. However, the TELRIC based approach to intercarrier compensation can be implemented with relatively *little additional regulatory oversight*. The Commission and the various state commissions do already examine and approve TELRIC studies for unbundled network elements and universal service proceedings for most large incumbent LECs. As such, the Commission and the state commissions do already have most information necessary to establish TELRIC based intercarrier compensation rates.

The promotion of a competitive marketplace – which is promoted by TELRIC based intercarrier compensation rates – will ultimately reduce the need for regulatory oversight. As discussed at some length in the introductory section to OPUCT's Comments, a market-based

approach to the issue intercarrier compensation for ISP-bound traffic *could have* resolved for regulators many issues surrounding the ILECs' collocation offerings and true costs of local switching.

By contrast, the bill-and-keep arrangements discussed in the *NPRM* – COBAK and BASICS – have the appearance of minimizing regulatory oversight, but they may in fact create numerous unintended consequences. This is particularly true if the FCC adopts some form of a bill-and-keep regime for local landline and local wireless traffic but not for other traffic, such as long distance traffic. As discussed in the introductory section to OPUCT's Comments, this approach may create a host of arbitrage opportunities that may require significant regulatory intervention to control. For example, a piecemeal – as opposed to a unified – approach will provide an enormous incentive for carriers to terminate long distance traffic over facilities established for local interconnection, so as to avoid access charges. In short, bill-and-keep will almost certainly increase the need for regulatory intervention rather than lessen it.

NPRM Paragraph 35

Will a particular intercarrier compensation proposal resolve existing problems or create any new problems with intercarrier compensation regimes?

OPUCT Comment:

A rigorous application of a unified TELRIC based intercarrier compensation regime will minimize "existing problems" and avoid new problems. Most importantly, a TELRIC based approach will eliminate or reduce tariff arbitrage, such as attempts to terminate long distance traffic under less expensive local compensation arrangements. If all forms of termination are TELRIC based, then access charges and local termination charges will be approximately the

same, and carriers will be more or less indifferent as to under which tariff they will terminate their traffic.

To the extent that the Commission is referring here to what it calls the "ISP problem," OPUCT has already discussed in the introductory section to these comments why it disagrees with the FCC on viewing the market dynamics surrounding ISP-bound traffic as a "problem."

Further, the FCC's proposed bill-and-keep regime will result in numerous attempts by carriers to use another carrier's network without compensation. This is particularly true for the piecemeal approach that the FCC is envisioning, in which bill-and-keep may apply only for local traffic but not for long distance traffic. Again, the most obvious result is that carriers will seek to terminate long distance traffic over local facilities so as to avoid access charges. In particular, carriers will seek to terminate long distance traffic through ISPs – whether or not the traffic actually traversed the Internet. That is, under a piecemeal approach, CLECs and IXCs are induced to terminate long distance traffic much more cheaply through their ISPs disguised as local traffic over the local interconnection trunks. In doing so, they will avoid the ILECs' access charges.

Additionally, as discussed in the introductory section to these comments, bill and keep

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⁷¹ See, for example, *NPRM* paragraph 65: "We note that the concerns motivating this *NPRM* primarily stem from certain wireline interconnection situations, *particularly those involving LEC-ISP interconnection.*" (Emphasis added.) Also, see *NPRM* paragraph 24.

will create numerous consumer related problems and possible cross-subsidies from residential ratepayers to business ratepayers. These cross-subsidies would be problematic and contravene federal and state efforts to preserve and promote universal service.

NPRM Paragraph 36

Is it necessary, considering the introduction of local competition and new technologies, to adopt a single, unified approach to intercarrier compensation? What are the advantages and disadvantages of doing so?

OPUCT Comment:

It is of paramount importance that the FCC and state commissions implement and adhere to a unified approach to intercarrier compensation. By contrast, a piecemeal approach to intercarrier compensation will induce carriers to tariff shop for the most advantageous arrangement. Also, there is little or no justification for not implementing a unified approach to intercarrier compensation given the various provisions for universal service support under the Telecommunications Act of 1996. Last, given that various types of terminating traffic use identical network facilities (local switching, tandem switching and transport), it is difficult to see how one could justify not imposing a unified intercarrier compensation regime.

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⁷² See *NPRM* paragraph 97, where the FCC indicates that it does not "anticipate implementing major changes to [the] access charge rules."

B. Policy Justifications for a Bill-and-Keep Regime

NPRM Paragraph 37

Do both the calling and the called party benefit from a call (i.e.: is it reasonable for both the originating and terminating LECs to recover costs from their endusers)? What implications does cost causality have for choice of an intercarrier payment regime?

OPUCT Comment:

In this paragraph the FCC is exploring the validity of the assumption, underlying CPNP regimes, that the calling party is the exclusive cost causer. As is discussed presently, OPUCT agrees with the FCC that this assumption may not necessarily be the only way to view cost causation and that the assignment of 100 percent of the incremental costs of terminating traffic to the calling party is, in part, arbitrary, though certainly not capricious. But, the implied cost assignment under the FCC's bill-and-keep proposals is no less arbitrary. Thus, given that bill-and-keep is inferior to cost based (such as TELRIC) regimes in an overall sense (see criteria discussed in paragraph 33) there is no reason to mandate a profound shift in the intercarrier compensation regime from cost based to bill-and-keep.

As discussed in the introductory section of these comments, there is merit in observing that the called party does have some cost responsibility by partaking in a telephone call. Clearly, if the called party decides not to answer the phone, certain costs – typically called call duration, or per MOU costs⁷³ -- will never come into existence. *As such, the called party can be referred to as an "accomplice" in the cost causation process.* This observation, however, falls well short

⁷³ Typically, in cost studies, certain costs of telephone calls, such as local switching costs, are bifurcated into call duration and call setup costs.

of concluding that there is an equal and joint cost recovery responsibility that justifies a bill-andkeep regime.

According to economic literature, where it concerns a joint cost – as is the case here -costs can be assigned in a convex combination between the activities/products/services that cause
the joint costs to come into existence. This means that under standard economic theory, the
joint costs of a telephone call can be assigned to the calling party and the called party in the
proportion of (x) and (I-x), where x ranges from I to 0. It is important to note that under
economic theory, any value of x is equally arbitrary. Under the FCC's bill-and-keep proposals,
the value of x is arbitrarily set at $\frac{1}{2}$. Under CPNP, the value of x is arbitrarily set at 1. (Under
calling involving 800 numbers, the value is set at 0, i.e., the called party assumes 100 percent of
the cost of the call.) Viewed from a narrow economic cost perspective -- and in the absence of
other considerations -- there is no reason to prefer one value of x over another. However, good
public policy is not made on the basis of narrow economic considerations. OPUCT believes that
if instead a broad array of other considerations are brought to bear on the analysis, then a
TELRIC based intercarrier compensation regime will be demonstrably superior to bill-and-keep
regimes.

Further, it should be recognized that the called party is already shouldering a significant

⁷⁴ See, for example, Daniel F. Spulber, *Regulation and Markets*, MIT Press, 1989, pp. 127-131.

⁷⁵ Under COBAC and BASICS, the originating carrier and the terminating generally split the cost of the call evenly, with the originating carrier recovering the costs of originating the call and the terminating carrier recovering the (continued....)

portion of the cost burden simply by paying the monthly subscription fee for telephone service, which in general, pays for the local loop facilities and a portion of the local switch (and associated overhead costs.)⁷⁶

OPUCT believes that, in the final analysis, the traditional view of cost causation – i.e., the calling party is the cost causer – leads to the most workable and appropriate intercarrier compensation regime. Again, a TELRIC based intercarrier compensation regime meets all the aforementioned criteria (see comments on paragraph 33).

With respect to the question of whether the fact that both the calling and the called party benefit from a call has implications for cost causation, the following observations are in order.

First, the issue of who benefits from a call is a *separate and distinct* issue from cost causation. By analogy, consider that when a particular homeowner decides to landscape his/her yard, all homeowners in the street, and passersby, may benefit. However, the fact that others benefit does not mitigate or alter the fact that the homeowner is the cost causer -- who caused the landscaping costs to come into existence. As such, all costs may rightly be recovered from the homeowner. (Of course, to the extent that passersby benefit from attractive landscaping, it does mean that there are positive externalities present, which may lead a municipality to subsidize landscaping, at least, of public land.)

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costs of terminating the call. As such, it can be said that each carrier recovers approximately half of the costs of a call.

Second, an approach that assigns/allocates costs based on who benefits from a call is quite unworkable as there is no way to measure who and by how much people benefit.⁷⁷ Also, there are many instances in which the called party most certainly does not benefit, and in fact, might experience a negative impact, such as with telephone soliciting.

NPRM Paragraph 38

Do terminating carriers have monopoly power over the interconnecting carrier under per-minute compensation regimes?

OPUCT Comments:

First and foremost, the Commission should note that as long as rates are TELRIC based, the question of whether or not a carrier has monopoly power is relatively immaterial: *TELRIC-based rates are consistent with competitive market rates*.

Further, it is important to distinguish between (a) local traffic and (b) long distance traffic.

(a) Local Traffic

With respect to *local traffic*, it is simply not true that the terminating carrier has sufficient monopoly power to extract monopoly rents from interconnecting carriers.

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⁷⁶ Reference the FCC's USF Order about what functionalities are included in local subscription rates.

⁷⁷ Universal service policies are based in part on the public policy doctrine of positive externalities associated with subscription and use of the public switched network. Public policy does not, however, purport to be able to measure individuals' "benefit" of telephone subscription and use of the network and to assign costs accordingly.

What matters is the balance of traffic, since carriers make payments only on the difference between the volume of outgoing and incoming traffic. Therefore, all a carrier needs to do to minimize its payments is to compete for those customers who throw traffic flows out of balance. That is, as long as all carriers in a local exchange have equal opportunities to compete, there is no reason for a carrier to be held hostage to the monopoly powers of others in terms of the total intercarrier compensation payments.

The objective of the Telecommunications Act of 1996 is, in large measure, to bring competition to local exchange markets. This means that, if the provisions of the Telecommunications Act of 1996 are implemented appropriately, then any carrier that is handing off local traffic in a particular local market should be able to compete for most, if not all, customers, served by the terminating carrier.

To the extent that this paragraph is motivated by a concern on the part of the FCC that the ILECs may be held "hostage" to the "monopoly" powers of the CLECs, say where it concerns ISP-bound traffic, the concern is entirely misguided.

Clearly, the ILECs still have the advantages of incumbency -- including a ubiquitous network - that allows them to compete for *all customers* in the local exchange. Thus, one cannot credibly maintain that the ILECs are unable to compete for, say, ISPs and are held hostage by CLECs for terminating local traffic. As discussed at some length in the introductory section to these comments, *the truth is that the ILECs have never seriously competed for ISPs*. (OPUCT has already quoted language from briefs filled by ISPs demonstrating that ILECs are hostile

towards ISPs.) However, ILECs were exonerated from the imperative to compete for ISPs and are now allowed to terminate traffic to off-net ISPs at increasingly lower rates, and, if the FCC adopts a bill-and-keep regime, potentially at future rates of \$0, *i.e.*, for free. Life doesn't get much better for ILECs.

(b) Long Distance Traffic

With respect to terminating long distance traffic, a good argument can be made that the terminating carrier enjoys market power over the interconnecting long distance carrier. However, the concerns are easily mitigated by two simple policies: (i) set rates at TELRIC, and (ii) mandate that terminating access charges be no higher than originating access charges.

When rates are set at TELRIC, they are consistent with competitive market results. The only concern remains the degree of regulatory oversight that is needed to establish TELRIC-based rates. While the regulatory burden may at first blush appear formidable in view of the number of carriers that assess access charges, the truth is that the issue can be adequately resolved with a few cost studies and cost proceeding. After all, the cost of terminating long distance traffic largely stems from use of the local and tandem switches and transport. All three cost components have been thoroughly examined over the years, and reasonable rates can be adopted without much additional work.

Further, setting terminating access rates on par with originating access rates further mitigates concerns about terminating carriers' undue market power. Originating access charges are increasingly subject to competitive pressures. If a long distance carrier on an ongoing basis

is assessed access charges that are excessive, the long distance carrier in most instances will be able to compete for significant customers. This is surely true in larger metropolitan areas where UNE-P is available from the ILEC.

Again, the goal here should be to have TELRIC-based rates *and* to promote competition. These twin policies will eliminate most of the problems that the FCC identifies in its *NPRM* and that it hopes to eliminate through ill-conceived bill-and-keep proposals.

NPRM Paragraph 39
Assertion that bill-and-keep solves common cost allocation problems.

OPUCT Comments:

The argument made by proponents of bill-and-keep that it solves the problem of allocating the common cost of the local loop is a *red herring*. The FCC has already found that – echoing the language in the Telecommunications Act of 1996⁷⁸ – the non-traffic sensitive cost of the loop are to be excluded from reciprocal compensation rates for local traffic. That is, the common costs of the loop are never to be included in reciprocal compensation in the first place, so there is no "common costs problem" with respect to setting cost-based rates for terminating local traffic. To be sure, only the "additional costs of terminating such traffic" should be included.

With respect to the cost of providing network access for long distance traffic, the

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⁷⁸ Section 252(d)(2)(ii) of the Telecommunications Act of 1996 states that reciprocal compensation rates should be at "such costs on the basis of a reasonable approximation of the *additional costs of terminating* such calls." Clearly, as the FCC itself found, the common costs associated with the loop are not to be included.

common costs of the loop are already recovered for the most part on a flat-rated basis from the end-user.⁷⁹ The remaining common cost allocation problems are minimal. In any event, the FCC has indicated that it will not consider extending bill-and-keep to access traffic until June, 2005.⁸⁰

NPRM Paragraph 40
Assertion that bill-and-keep provides end-users with some control over access arrangements.

OPUCT Comments:

As for the argument that bill-and-keep may provide end-users a sense of direct control over access arrangements, this argument is not persuasive. First, as noted, the FCC has already indicated that it will not consider extending bill-and-keep to access traffic until June, 2005. 81

Second, the problem here is not related to intercarrier compensation: rather the issue here is that IXCs are not allowed to de-average their rates. This situation, however, was deliberately created in view of valid public policies that seek to promote universal service and affordable calling, even to high cost areas through a mechanism of rate averaging. That is, callers in high cost areas receive some form of support from callers in low cost areas. The essential mechanism here is the assessment of access charges. Introducing bill-and-keep removes this mechanism

⁷⁹ OPUCT disagrees with the FCC's collection mechanism for loop costs, most recently adopted in the CALLS order, because it discriminates against low volume users, over-collects loop costs, and is not supported by any cost study. Nevertheless, it is the method affirmed by the FCC and thus, does not justify the use of the bill and keep proposal in this NPRM.

⁸⁰ See *NPRM* paragraph 97, where the FCC indicates that it does not "anticipate implementing major changes to [the] access charge rules."

⁸¹ Id.

without introducing an offsetting mechanism. This can hardly be called a solution: rather, it is simply a method for terminating a support mechanism.

NPRM Paragraph 41

Assertion that deregulation of CPE under the 1980 Computer II decision is a precedent for bill-and-keep regime.

OPUCT Comments:

The notion that "bill-and-keep proposals may be seen as following the precedent of the Commission's 1980 *Computer II* decision that deregulated CPE" (customer premises equipment) is not relevant either. Owners of CPE do not receive compensation for traffic that terminates on their equipment. That much is true. However, for traffic that originates at the CPE and traverses the public switched network, to terminate in the local exchange or elsewhere as long distance traffic, there most certainly are usage charges: the owner of the CPE (i.e., the end-user caller) is either assessed explicit usage charges or usage charges are included in a flat monthly subscription charge. Also, the costs for the local service connections, such as the basic voice grade local loop and the Direct Inward Dial and Direct Outward Dial trunks for PBXs, are not shared between the CPE owner and the ILEC, as they would be under a bill-and-keep arrangement. In short, there is no bill-and-keep arrangement with respect to CPE, as mistakenly implied by the statement that there is a "zero interconnection rate for CPE," and the deregulation of CPE under the Commission's 1980 *Computer II* decision is no precedent.

C. Re-examining the Efficiencies of Bill-and-Keep Arrangements

NPRM Paragraph 44

For what reasons and under what conditions might bill-and-keep arrangements be efficient or inefficient? Are the rationales in the DeGraba and Atkinson-Barnekov working papers or any other rationales for finding bill and keep efficient valid? Specifically, address the efficiency of bill-and-keep if (1) only one party to the call benefited from the call; (2) the two interconnected networks had unbalanced traffic; (3) the two networks had dissimilar costs or cost structures (e.g., one network exhibited significant economies of scale); or (4) the two networks offered different qualities of service?

OPUCT Comments:

As discussed previously, OPUCT believes that, in general, bill and keep is efficient only under a very limited set of circumstances. For this reason, among others, OPUCT advocates a TELRIC based interconnection regime. With respect to the specific four questions raised by the Commission, OPUCT comments as follows.

Issue 1: Specifically, address the efficiency of bill-and-keep if only one party to the call benefited from the call.

As discussed above, the issue of who benefits from a call is a *separate and distinct* issue from cost causation. Moreover, an approach that assigns/allocates costs based on who benefits from a call is quite unworkable as there is no way to measure who and by how much people benefit.

The Commission should not adopt a bill-and-keep regime based on nebulous ideas of who may benefit from a call.

Issues 2,3, and 4: Specifically, address the efficiency of bill-and-keep if:

(2) The two interconnected networks had unbalanced traffic;

- (3) the two networks had dissimilar costs or cost structures (e.g., one network exhibited significant economies of scale); and/or
- (4) the two networks offered different qualities of service?

If traffic is not balanced, then bill-and-keep is not efficient. The same is true if carriers have significantly dissimilar cost structures (either because of differences in economies of scale or quality of service.)

Underlying the notion of bill-and-keep is that carriers are compensated in kind. That is, under bill-and-keep, carriers decide to barter their call termination functionalities in approximately offsetting proportions. As Section 252(d)(2)(B)(i) of the Telecommunications Act of 1996 notes:

(B) RULES OF CONSTRUCTION.—

This paragraph shall not be construed-- (i) to preclude arrangements that afford the *mutual recovery of costs through the offsetting* of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements); (Emphasis added.)

It is important to note that the Telecommunications Act of 1996 speaks of "the mutual recovery of costs through the offsetting of reciprocal obligations." This process, by which carriers barter their call termination functionalities in approximately equal proportions is only possible if traffic is approximately in balance and if carriers have approximately the same cost structure. If traffic is significantly out of balance, then obviously the process of bartering call termination functionalities will leave one carrier significantly under-compensated.

The Commission should note that the suggested recourse – that carriers recoup the

revenue shortfall from their end-users — is not efficient. Clearly, the imbalance in traffic that causes a carrier to under-recover its costs for terminating traffic is not due to all end-users in the same proportion. Some end-users have more incoming traffic than others. A scheme that requires carriers to recoup the cost of terminating traffic from end-users, therefore, will invariably involve cross-subsidization. Specifically, end-users that cause high volumes of incoming calls relative to out going calls will be cross-subsidized by end-users that cause only few incoming calls. Almost certainly this will involve cross-subsidization from residential customers to larger volume business customers. There is simply no justification for such a cross-subsidization scheme: it surely would not be efficient and run contrary to everything public policy is trying to accomplish with respect to universal service.

The only way to avoid this type of cross-subsidization is to measure incoming calls – both local and long distance – and to charge end-users accordingly. This type of measuring has never been attempted by carriers and would surely cause incremental measuring costs that are not incurred under the current regime. (Measuring incoming traffic on trunk groups, as is commonplace, is very much cheaper than measuring traffic to individual end-users. For a cost estimate, see OPUCT comments on *NPRM* paragraph 51.)

Further, measuring incoming traffic to recoup call termination costs from end-users, the called parties, will radically alter calling patterns on the public switched network. Most obviously, end-users will seek ways to avoid having to pay for receiving calls, particularly those that they do not want to answer in the first place. (Consumer related issues are discussed in response to paragraph 60.) In any event, it is not easy to predict what calling patterns will

emerge from such a profound shift in telecommunications end-user pricing. Surely, there is no guarantee that the changes will be efficient.

Last, but not least, when traffic is out of balance under bill and keep, carriers themselves may seek to avoid serving certain types of customers, such as ISPs, with large volumes of incoming calls. These customers cause significantly higher network costs than others, and as such, run the risk of becoming the *persona non grata* among telecommunications customers. Particularly where it concerns ISPs, this result would be most unfortunate, given the importance of the independent ISP industry to affordable Internet access.

NPRM Paragraph 45

Do bill-and-keep arrangements preclude efficient forms of price discrimination? Are the potential efficiency gains of non-uniform pricing outweighed by the benefits of bill-and-keep arrangements?

OPUCT Comments

OPUCT assumes that the FCC is seeking comments here on how bill-and-keep would affect efficient forms of price discrimination, such as the rate differential that exists between, say, basic business (local service) lines and basic residential (local service) lines.

Because the FCC has indicated that it does not intend to alter the switched access regime for long distance traffic, our comments consider only the impact of implementing bill and keep for local traffic. OPUCT believes that existing forms of efficient price discrimination would be largely unaffected.

Much of the fixed, NTS, cost of the network are already recovered through flat-rated

charges, in the form of monthly subscription charges that recover part of the costs of the loop and the NTS cost of the switch.⁸² Because intercarrier compensation for local traffic does not recover NTS costs, a move toward bill and keep would not impact existing forms of price-discrimination.

However, as discussed previously, bill and keep could lead to unintended forms of cross-subsidization, particularly, from residential customers to large volume business customers. This type of cross-subsidization would be highly undesirable from a public policy perspective and could partly, if not totally, offset the positive impact of existing price discrimination arrangements, implemented in pursuit of national and state universal service objectives.

NPRM Paragraph 46

What are possible approaches to allocating transport costs under bill and keep (other than the three previously noted—DeGraba's, Atkinson-Barnekov's, and the approach whereby networks share costs based on their relative balance of peak traffic)? What issues should be considered regarding alternative approaches suggested by other parties?

OPUCT Comments

The FCC's NPRM has sought to portray its bill-and-keep proposals as the establishment of a unified intercarrier compensation regime, and even more dramatically, as a shift in the regulatory paradigm from calling party network pays (CPNP) to one where carriers recoup all costs from their own end-users. As OPUCT has already pointed out, this claim is undermined in

⁸² OPUCT disagrees with the FCC's collection mechanism for loop costs, most recently adopted in the CALLS order, because it discriminates against low volume users, over-collects loop costs, and is not supported by any cost study. Nevertheless, it is the method affirmed by the FCC and thus, does not justify the use of the bill and keep proposal in this NPRM.

the first instance by the FCC's stated intent in *NPRM* paragraph 97 that it would not apply bill and keep to long distance traffic but only to local traffic. In a sense, therefore, the FCC is really just asking comments on a limited proposal for mandatory bill and keep for local traffic rather than on a major shift in the regulatory paradigm. Further diminishing the claim that a shift from CPNP to bill and keep represent a fundamental shift in the regulatory paradigm are the proposals for how to allocate transport costs.

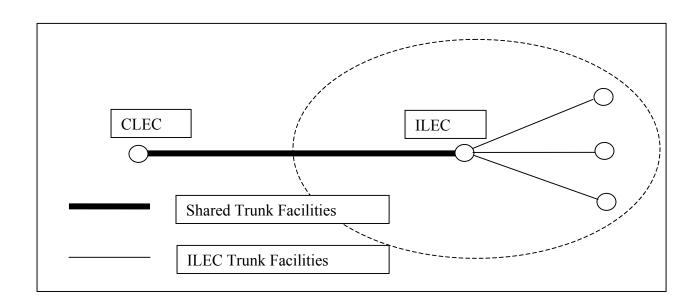
The first proposal offered for comment – the DeGraba proposal – suggests that the calling party's network should be responsible for the cost of transporting the call to the called party's central office. Clearly, this proposal is a continuation of the existing paradigm (and current practices) in which the calling party's network is viewed as the cost causer and should pay for transport. There is no paradigm shift here.

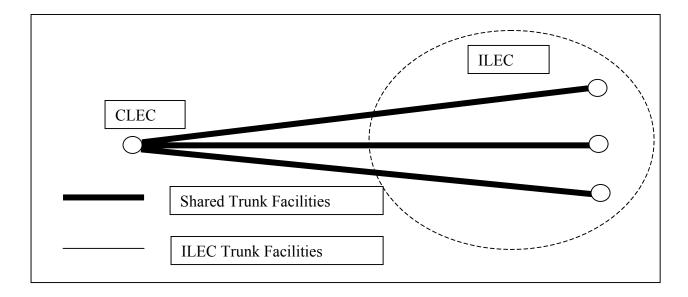
Under the second proposal, the Atkinson-Barnekov proposal, carriers are supposed to "split the cost of transport equally." While this proposal appears consistent with bill and keep (and a departure from CPNP), further examination reveals some real complications that draw into question any claims that carriers are evenly splitting transport costs.

For example, the number of inter-machine (inter-switch) trunks, and thus transport costs, will vary greatly depending on whether the CLEC interconnects at the ILEC's tandem or at the ILEC's various end-offices. If the CLEC interconnects at the tandem, then the ILEC has to pay 100 percent for all the transport from the end-offices to the tandem. If the CLEC interconnects at all the end-offices – and not at the tandem – then costs are split evenly, but the configuration is

highly inefficient from a network engineering perspective. This issue is illustrated in the two diagrams below.

The first diagram portrays a situation in which the CLEC interconnects at the ILEC's tandem and shares the costs of the trunk between its central office and the ILEC's tandem. Under this scenario, the CLEC does not share the costs of transport from the ILEC's end-offices to the tandem – these costs are borne 100 percent by the ILEC. The second diagram portrays a situation where the CLEC interconnects at the ILEC's end offices. In this case, the CLEC and the ILEC share the cost of transport equally. This configuration, however, is not efficient from a network engineering perspective.





Thus, the Atkinson-Barnekov proposal only has the appearance of splitting transport cost equally (and being consistent with bill and keep): in truth, the proportion in which transport costs are shared relies entirely on the manner in which networks interconnect. But, when carriers negotiate over how they will interconnect, it is very likely that first and foremost they will consider which carrier's traffic is being terminated and in what volumes. That is, at the core of the negotiations will be traditional cost causation concepts that identify cost responsibility consistent with CPNP.

The third proposal to share the cost of transport based on the relative balance of peak traffic is a straightforward application of traditional CPNP and inconsistent with bill and keep. Under bill and keep, the direction of the traffic flows are irrelevant and so is the peakedness of that traffic. Under this third proposal, however, it is the relative peak of a carrier's traffic that determines its portion of transport costs. That is, it is assumed that the carrier that causes the peak is the cost causer. Again, this proposal is a simple application of the existing CPNP regime.

In short, the transport proposals on which the FCC is seeking comments are either explicitly (the DeGraba and the third proposal) or implicitly (the Atkinson-Barnekov) applications of CPNP. In any event, none lives up to the claim that it concerns a shift in the regulatory paradigm toward a unified intercarrier compensation regime.

NPRM Paragraph 47

Regarding DeGraba's proposal, will the potential savings offered under a meetpoint arrangement induce carriers to agree to a more efficient solution to the transport problem? How strong and effective will this incentive be in negotiating a solution where traffic between the parties is unbalanced?

OPUCT Comments:

As discussed in response to *NPRM* paragraph 46, DeGraba's proposal for transport is a straightforward application of CPNP. The proposal recognizes that the calling party's network bears the cost responsibility for transporting the call to the called party's network. As such, there is no new proposal here. As for the incentive to negotiate a meet point arrangement, this is entirely dependent on the specific considerations of the parties involved, such as the business plan of the CLEC, the flow of traffic and the working relationship that ILEC and CLEC personnel have established. In general, underlying the negotiations will be, almost certainly, the traditional notions of cost causation, consistent with CPNP. That is, if a carrier perceives that the other carrier's traffic is causing the costs, the first carrier will be less inclined to adopt a network architecture in which it incurs more than its perceived fair share of the costs.

NPRM Paragraph 49

In what sense, if at all, are the DeGraba, the Atkinson-Barnekov, or any alternative approaches efficient and/or competitively neutral? Will any approach likely result in entities making efficient choices between subscribing to a network as an end-user customer and interconnecting with a network as a carrier?

OPUCT Comments:

How the DeGraba and Atkinson-Barnekov proposals will affect end-user choices depends in large part on how the carriers are opting to recoup the costs of terminating traffic from their end-users. As discussed previously, the implementation of bill and keep may result in significant cross-subsidization from residential customers to business customers. Such a cross-subsidization is inefficient. Because the DeGraba proposal is an application of CPNP – and not of bill and keep – it does not suffer from this deficiency. As such, the DeGraba is the more efficient proposal (contrary to the claims of DeGraba, who under the "new paradigm" views his own proposal as inefficient.)

The Atkinson-Barnekov proposal will exacerbate the cross-subsidization that may result from bill and keep. To the extent that a carrier will be forced to pay for transport for incoming traffic, the carrier will have to increase its end-user rates. But, because the industry is mostly unfamiliar with measuring incoming local calls, OPUCT believes that carriers will quite possibly opt to recover the costs for terminating calls from their end-users on an averaged flat-rated basis. Given that not all customers have the same volume of incoming calls, OPUCT believes that the ultimate effect is a cross-subsidy from low volume residential customers to high volume business customers. In sum, the Atkinson-Barnekov proposal will exacerbated this type of cross-subsidy.

As for the competitive neutrality⁸³ aspects of the various proposals, the FCC should consider that entrepreneurs make their living seeking out market opportunities. This means that if the FCC creates opportunities where carriers can use the network of other carriers without proper compensation, entrepreneurs will be quick to act upon those opportunities. For this reason, among others, OPUCT believes that cost based intercarrier compensation regimes are ultimately more robust than alternative regimes, such as bill and keep.

NPRM Paragraph 50

Considering that for an efficient resource allocation the marginal benefit from consumption should equal the marginal cost of production, to what extent should cost sharing be a criterion for selecting an intercarrier compensation regime? How important is an interconnection regime's equitable cost distribution relative to its other efficiency properties?

OPUCT Comments:

Clearly, for the terminating carrier, under bill and keep, there is no relationship between marginal benefit and marginal cost. That is, as a carrier terminates more traffic for another carrier, its costs go up, but there are no – or no immediate – commensurate benefits (in the form of revenues or otherwise⁸⁴).

This contrasts sharply with a TELRIC based regime, under which an increase in traffic results in a commensurate increase in costs and compensation—no more and no less – thus

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⁸³ Competitive neutrality here means that a particular intercarrier compensation regime does not favor a particular carrier.

ensuring efficiency.

The notion of an "equitable cost distribution" is peculiar if the FCC means something other than a cost causative distribution. Because it concerns compensation between carriers, the only equitable distribution is an economically efficient distribution based on cost causation.

NPRM Paragraph 51

Transactions Costs. Regarding the transaction costs of measuring and billing associated with terminating access, what are the relative sizes of transactions costs for various alternatives (e.g.: billing the terminating network, billing customers, etc.) and how do these transaction costs compare with other efficiencies or inefficiencies for the various alternatives?

OPUCT Comments:

As the *NPRM* indicates, bill and keep will require that carriers recoup the cost of terminating traffic from their own end-users. This might lead certain carriers to measure incoming local traffic to discern which end-users are the cost causers and to charge them accordingly.

The cost of implementing the necessary software and hardware for measuring incoming local traffic will vary from carrier to carrier, depending, among other things, on the number of switches in a carrier's network.

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⁸⁴ If usage based charges apply for incoming traffic, then there would be incremental revenues. OPUCT believes, however, that more likely than not carriers will impose flat monthly charges. In this case, there would be no incremental revenues associated with increases in incoming traffic.

It is important to note here that it concerns a different type of measuring than LECs currently do with IXCs for switched access. LECs currently measure incoming traffic on trunk groups on the trunk side of the switch. This is very different from measuring the traffic that terminates to the line side of the switch to end-users.

The above comments notwithstanding, OPUCT is able to give the Commission the following estimate for measuring incoming calls on a per message basis. The data below are derived from Ameritech Illinois' tariffed UNE-P service offerings. Ameritech Illinois' tariffed UNE-P offering includes a service called Daily Usage Feed, which provides CLECs (that order Ameritech Illinois' UNE-P) with the necessary call detail to bill its end-users. The Daily Usage Feed is described as follows:

ULS-ST Daily Usage Feed85

The Company will provide a Daily Usage Feed (DUF) to each Carrier that subscribes to ULS-ST that contains, on a per-call basis, *originating and terminating usage* detail for each line-side ULS port used to provide ULS-ST. The DUF will include the available local (originating and terminating) and access (originating and terminating) usage records.

Thus, under the Daily Usage Feed service, Ameritech Illinois is providing CLECs call details for originating and terminating traffic necessary to bill individual end-users. The permessage charge is \$0.000918.86 If for purposes of this analysis, we assume balanced traffic, then

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⁸⁵ Ameritech Illinois, Daily Usage Feed, Tariff Ill. C.C. No. 20, Part 19, Section 21, Original Sheet No. 8.

⁸⁶ Ameritech Illinois, Daily Usage Feed, Tariff Ill. C.C. No. 20, Part 19, Section 3, Original Sheet No. 42.

based on the average call patterns for Ameritech Illinois' end-users that have 1,622⁸⁷ local messages per month, there will be 811 incoming messages per month. Given these observations, a total costs for measuring incoming calls can be call calculated as follows:

	Per Message Charge (a)	Average Monthly Number of Messages (b)	Average Monthly Number of Incoming Messages w/ balanced traffic (c) = (b)/2	Average Per Line Total Monthly Cost for Measuring Incoming Calls (a) x (c)
Daily Usage Feed	\$ 0.000918	1,622	811	\$ 0.74

Thus, having to measure incoming calls for end-users may cost LECs approximately \$0.74 per line per month. If this figure is correct, then the increased measuring costs almost certainly offset any efficiency gains that could possible be associated with bill and keep.

D. Bill and Keep as a Solution to Existing Interconnection Issues

NPRM Paragraph 52

Will specific bill-and-keep proposals resolve, in whole or in part, existing interconnection problems, such as the advantage IP telephony currently has over traditional long-distance service, or the ISP reciprocal compensation problem and the "one-way-network" problem? Will COBAK or other forms of bill and keep reduce incentives, created by the existing system of interconnection regulation, for carriers to invest inefficiently?

OPUCT Comments:

OPUCT believes that by introducing bill and keep, the FCC may be inviting more problems than it solves (if it solves any at all.) The narrow economic arguments used to support

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⁸⁷ I.C.C. Docket 96-0486, Ameritech Illinois, Direct Testimony of William Palmer, page 11.

bill and keep will most likely not ward off the many forms of arbitrage of which entrepreneurs can conceive when regulators allow them to use another carrier's network for free. This is particularly true since the FCC has already indicated that it will not apply bill and keep to long distance traffic. The resulting *bifurcated* compensation scheme with bill and keep for local traffic and CPNP for long distance traffic presents the worst of all possible worlds. Further, the comments the FCC will receive are for the most part theoretical in nature and only conjecture about the opportunities for arbitrage schemes that entrepreneurs may seek to exploit -- *the truly* "successful" schemes will only become manifest after the fact. For this reason, among others, OPUCT advises against a departure from the well established principles of cost based pricing.

Additionally, the FCC seeks comments on two specific issues: (a) the alleged advantage that IP telephony has over traditional long distance traffic; and (b) the ISP reciprocal compensation and the "one way network" problem.

(a) Alleged advantage of IP telephony over traditional long distance

The perceived advantage that IP telephony has over traditional long distance stems entirely from the fact that rates for terminating traffic on a ILEC's network are not cost based. Clearly, as long as there is a non-cost based differential between terminating long distance traffic and local traffic, carriers will be induced to use the cheaper one to terminate traffic. Other than being assessed lower termination charges, IP telephony has no inherent advantage over traditional long distance. (And if it did, then it would be economically and socially desirable to move long distance traffic away from traditional long distance and toward IP telephony.) *Thus, the problem to be solved is the inappropriate differential between terminating local and long*

distance traffic (which is an arbitrary distinction in the first place).

As a practical matter, given the FCC's stated intent to not adopt bill and keep for long distance at least until June, 2005,88 the FCC's proposals will certainly increase IP telephony's advantage over traditional long distance. In fact, the FCC can be assured that as a result of the FCC's *NPRM* there are many business plans being drawn up and shopped around for financing that seek to exploit the irresistible profit opportunities the FCC is about to create.

As a theoretical matter, even if the FCC were to adopt bill and keep for both local and long distance traffic, the question remains: does this solve the problem and could it have been solved more efficiently? OPUCT believes that mandating bill and keep for all traffic might solve the narrow problem of IP telephony's artificial advantage over traditional long distance. Almost certainly, however, this solution will create other problems that may be worse. The simplest solution is to mandate TELRIC-based rates as the unified intercarrier compensation scheme. Clearly, if termination charges for traditional long distance traffic and IP telephony (i.e., local traffic) are TELRIC based, then the problem has been permanently solved without creating opportunities for new problems.

(b) The ISP reciprocal compensation and the "one way network" problem

In its introduction to these comments⁸⁹, OPUCT has discussed this issue in considerable

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⁸⁸ See *NPRM* paragraph 97, where the FCC indicates that it does not "anticipate implementing major changes to [the] access charge rules."

⁸⁹ See comments, Section II.D. and III.A.⊥35.

detail how the dynamics surrounding ISP-bound traffic have mistakenly been perceived by the FCC as an "ISP problem." At this point, we note that as long as intercarrier compensation rates are TELRIC based, there is no problem with one-way traffic, whether it is ISP-bound or otherwise.

The FCC should consider that as long as the TELRIC costs for terminating traffic are appropriately defined and identified, the ILECs should be indifferent as to whether they themselves or another carrier terminates certain traffic. For example, if it is decided in the context of a cost proceeding that it costs, say, Southwestern Bell of Texas ("SWBT") \$x.xx per minute to terminate a call, then SWBT should be indifferent as to whether SWBT itself or a CLEC terminates a call originated by one of SWBT's end-users – either way, it costs SWBT \$x.xx.

Further, as already explained in the introduction to these comments, if the ILECs believe that they pay too much to other carriers for terminating traffic to certain types of customers, such as ISPs, then they have easy recourse to fixing that "problem": all they need to do is compete for such customers. Given that the ILECs have near ubiquitous facilities and enjoy all the other advantages of incumbency, there is no reason why they could not win back ISPs and other customers with mostly incoming traffic. Clearly, ILECs have not yet done so seriously, in part because regulators have been quick to accommodate the ILECs' concerns, as is evident from the FCC's *ISP Intercarrier Compensation Order*, the *NPRM* and various state commission orders. Rather than seeing ILECs compete for ISPs, regulators have been inclined to mislabel the migration of ISPs to CLECs as a problem – very much like "bypass of the public switch network

(read ILEC network)" used to be perceived as a problem. This is unfortunate.

NPRM Paragraph 53

Will all and keep, as DeGraba argues, eliminate the terminating monopoly? Will a bill-and-keep arrangement eliminate any market power arising from the local carrier's bottleneck control, or could, because the terminating local carrier still possesses bottleneck control over the trunk port at the central office, a terminating local carrier still exercise monopoly power? If it could, then would it be sufficient simply to prohibit the terminating carrier from charging a traffic-sensitive charge for the trunk port?

OPUCT Comments:

In general, the Commission should note that as long as rates are TELRIC based, the question of whether or not a carrier has a terminating monopoly power is relatively immaterial: TELRIC-based rates are consistent with competitive market rates.

Further, it is important to distinguish between (a) local traffic and (b) long distance traffic.

(a) Local Traffic

With respect to *local traffic*, it is simply not true that the terminating carrier has sufficient monopoly power to extract monopoly rents from interconnecting carriers.

What matters is the balance of traffic, since carriers make payments only on the difference between the volume of outgoing and incoming traffic. Therefore, all a carrier needs to do to minimize its payments is to compete for those customers that throw traffic flows out of balance. That is, as long as all carriers in a local exchange have equal opportunities to compete, there is no reason for a carrier to be held hostage to the monopoly powers of others in terms of

the total intercarrier compensation payments.

The objective of the Telecommunications Act of 1996 is, in large measure, to bring competition to local exchange markets. This means that, if the provisions of the Telecommunications Act of 1996 are implemented appropriately, then any carrier that is handing off local traffic in a particular local market should be able to compete for most, if not all customers, served by the terminating carrier.

(b) Long Distance Traffic

With respect to terminating long distance traffic, an argument can be made that the terminating carrier enjoys market power over the interconnecting long distance carrier. However, the concerns are easily mitigated by two simple policies: (i) *set rates at TELRIC*, and (ii) mandate that terminating access charges be *no higher than* originating access charges.

When rates are set at TELRIC, they are consistent with competitive market results. The only concern that remains is the degree of regulatory oversight that is needed to establish TELRIC-based rates. While the regulatory burden may at first blush appear formidable in view of the number of carriers that assess access charges, the truth is that the issue can be adequately resolved with a few cost studies and cost proceeding. After all, the cost of terminating long distance traffic largely stems from use of the local and tandem switches and transport. All three cost components have been thoroughly examined over the years, and reasonable rates can be adopted with much additional work.

Further, setting terminating access rates on par with originating access rates further mitigates concerns about terminating carriers' undue market power. Originating access charges are increasingly subject to competitive pressures. If a long distance carrier on an ongoing basis is assessed access charges that are excessive, the long distance carrier in most instances will be able to compete for significant customers. This is surely true in larger metropolitan areas where UNE-P is available from the ILEC.

Again, the goal here should be to have TELRIC-based rates *and* to promote competition. These twin policies will eliminate most of the problems that the FCC identifies in its *NPRM* and that it hopes to eliminate through ill-conceived bill-and-keep proposals.

Of course, the FCC has already indicated that it will not consider implementing bill and keep for access traffic at least until June 2005.90

(c) Trunk port charges

The FCC's request for comment here is confusing. Under the FCC's proposed bill-and-keep proposals, there would not be a charge for the trunk port in the first place. So, it is not clear why the FCC is asking comments on a proposal to prohibit "carriers from charging a traffic-sensitive charge for the trunk port."

⁹⁰ See *NPRM* paragraph 97, where the FCC indicates that it does not "anticipate implementing major changes to [the] access charge rules.".

Of course, under CPNP, shared trunk ports are generally considered a usage sensitive cost. Thus under a cost based approach, it would be appropriate to charge on a per MOU basis. (However, if the trunk port is dedicated, then a flat-rated port may be appropriate as well – such as the trunk port arrangement offered by Verizon in New York for interconnection purposes.)

NPRM Paragraph 54

Will DeGraba's or Atkinson-Barnekov's proposals reduce the existing distortion of an entity's decision whether to subscribe as an end-user customer, or to interconnect as a network? How might their proposals affect the subscription/interconnection decisions of entities that primarily or exclusively originate traffic, such as payphones?

OPUCT Comments

The incentives for an entity, such as a company running a private network or a large PBX, to interconnect as a network are immensely complex and will depend on a variety of factors. First, if an entity decides to interconnect as a network, it must incur the regulatory expenses for certification as a local telephone company. The intricacies and costs associated with the regulatory process are probably sufficient to discourage smaller end-users from exploring this option.

Second, an entity's telecommunications operations have to be sizeable to justify running their facilities as a network, without assistance from the local phone company. For larger telecommunications users, the decision to interconnect as a network, and no longer as an enduser, will hinge on how their costs will be affected by this reclassification. The pertinent cost categories here are associated with, among others, the following services: local subscription, local usage, high capacity data, toll and long distance.

OPUCT believes that there is no conclusive answer to the question of how the various bill-and-keep proposals may affect the incentives for large end-users to interconnect as networks. First, each of the aforementioned cost categories is affected in a different manner, depending on the various interconnection regimes that the FCC is exploring. Second, each entity will consume the aforementioned telecommunications services in varying proportions. The possible permutations appear simply too numerous to allow for a conclusive answer.

Nevertheless, OPUCT would like to offer the following insights on how certain costs are affected by a decision to interconnect as a network.

(a) Trunking/Transport

If an entity, say, with a large PBX, decides to interconnect as a network, then the PBX trunks will be reclassified as interconnection trunks. At a minimum, therefore, the DID (direct inward dial) trunks for incoming traffic are now the cost responsibility for the ILEC. This would be true under the traditional CPNP regime as well as under the DeGraba transport proposal. Under both regimes, the terminating carrier is responsible for providing transport facilities to the other carrier's end-office. Because the entity's PBX is reclassified as a central office, the ILEC is responsible for providing transport to the PBX/end-office for all terminating traffic. The cost savings can be significant. Essentially, the same analysis and conclusion applies under the Atkinson-Barnekov transport proposal. Under this proposal, carriers share the cost of transport. Thus, the PBX trunks are now reclassified as transport facilities and the ILEC will pay half of the costs. Again, the cost savings can be significant.

Thus, as far as the costs of trunking/transport is concerned, the bill-and-keep proposals do provide large telecommunications users with a continued incentive to interconnect as a network.

(b) Long Distance

As an end-user, a large telecommunications user will incur access charges (as part of its IXC's charges for long distance calling). By interconnecting as a network, the large telecommunications user will now use the ILEC's transiting services to connect its network to its IXC. Since transiting charges are typically higher than access charges, there is little to be gained here. (Note, the bill-and-keep proposals allow carriers to charge for transiting traffic.)

While these two observations are hardly an exhaustive examination of the incentives for large telecommunications users to interconnect as networks rather than as end-users, they do suggest that mandating bill and keep may not change those incentives in a significant manner.

NPRM Paragraph 55

How would a bill-and-keep arrangement affect end-user rates? Should end-user rates be regulated, and if so, what is the appropriate rate structure to adopt? Should LECs recover termination costs through per-minute charges or through flat monthly charges? Should carriers be allowed to give customers a choice between per-minute rates or flat monthly rates for termination? What measures could protect called parties from charges caused by unwanted calls?

OPUCT Comments:

Clearly, because the cost of terminating traffic are to be recovered from end-users, *local* end-user rates are adversely affected under the FCC's proposals. This is an area of grave concern for OPUCT, which will be discussed in more detail below (in response to *NPRM*

paragraphs 58 through 65.)

As to the question of whether end-user rates should continue to be regulated, the answer is an unqualified *yes*. The intercarrier compensation regimes have little or no bearing on the monopolistic nature of local exchange markets. There is absolutely no reason, therefore, to lessen regulatory oversight of end-user rates.

Further, as discussed previously, bill-and-keep proposals introduce a potential for inefficient cross-subsidization between end-users. This is particularly true for the DeGraba proposal, which seems to prefer that termination costs be recovered on a flat-rated basis. Invariably, flat monthly charges are averaged across large groups of end-users. Because not all end-users have the same volume of incoming calls, establishing a flat monthly charge may cause low volume end-users to cross-subsidize high volume end-users. This type of cross-subsidization is particularly onerous where it concerns low volume residential end-users cross-subsidizing high volume business customers. If this type of cross-subsidization were to result, it would certainly offset any efficiency gains the FCC believes are associated with bill and keep. In short, commissions should impose only flat monthly charges that appropriately differentiate low volume customers from high volume customers. Of course, the entire cross-subsidization problem can be obviated by rejecting bill and keep – other than on a voluntary basis where local traffic is relatively balanced – and mandating a strict TELRIC based intercarrier compensation regime.

It is also important to note here that the question of whether usage based or flat monthly

local end-user charges are more appropriate fall under the jurisdiction of state commissions.

This issue is explored elsewhere in more detail.

NPRM Paragraph 56

Do the DeGraba and Atkinson-Barnekov approaches eliminate the need for regulators to set the level and structure of termination rates?

OPUCT Comments:

To the extent that the DeGraba's and Atkinson-Barnekov's bill-and-keep proposals have no rate level and structure (i.e., termination on another carrier's network is free), by definition, there are no rate levels or structure to be regulated.

Almost certainly, however, numerous unknown problems related to the regulatory fiat to terminate for free on other carriers' networks will emerge.

Further, under bill and keep, regulators will lose the benefit of how TELRIC based intercarrier compensation rates force ILECs to reveal their true costs. OPUCT has already discussed how the ever increasing reciprocal compensation payments forced ILECs to reveal that their local switching costs were significantly less than initially claimed. OPUCT also previously discussed how appropriate regulatory action might have forced ILECs to offer efficient collocation arrangements to ISPs (and under the non-discrimination provisions of the

⁹¹ See comments, section II.D.

Telecommunications Act of 1996) and CLECs.⁹² These are but two examples of competitive pressures associated with TELRIC based intercarrier compensation that may ease or facilitate regulatory intervention.

NPRM Paragraph 57

Will DeGraba's proposal encourage networks to voluntarily negotiate interconnection agreements and avoid regulatory intervention? Will, as the Atkinson-Barnekov proposal claims, the incremental costs of interconnection be easy to estimate and generally not involve incremental switching costs? Is any alternative method of allocating transport costs superior to the current treatment of transport costs?

OPUCT Comments:

In response to *NPRM* Paragraph 46, OPUCT has demonstrated that the three transport proposals on which the FCC seeks comment (DeGraba, Atkinson-Barnekov, and relative peak cost responsibility,) are in essence extensions of the current CPNP regimes. Under these regimes, as under the current treatment of transport costs, there is a general recognition that a carrier is responsible for the transport facilities for outgoing calls. Therefore, most regulatory intervention regarding transport has involved the question of where carriers are allowed or required to interconnect.

For example, Verizon's *Geographically Relevant Interconnection Points* ("GRIPS") proposal has been an issue of contention in many state proceedings, not because of reciprocal compensation rate levels, but because it required CLECs to interconnect at a large number of

⁹² *Id*.

Verizon end offices, thus greatly increasing the CLECs' transport costs. *It is unclear how any of the FCC's proposals would improve the incentives for Verizon and the CLECs in the generally zero-sum negotiations over transport costs.*

E. Weighing the Potential Disadvantages of Bill-and-Keep Arrangements

NPRM Paragraph 58

What implementation issues or problems are likely to arise in a bill-and-keep regime, especially regarding the DeGraba and Atkinson-Barnekov proposals?

OPUCT Comments:

OPUCT believes that mandating bill and keep will create a number of consumer related problems. These problems are discussed in response to other paragraphs in this section of the *NPRM*.

Further, with respect to issues not explicitly related to consumers, OPUCT would like to note that bill and keep is likely to inspire entrepreneurs to seek out opportunities for profit by using other carriers' networks for free. This is particularly true if the FCC mandates bill and keep for local traffic but not for long distance traffic. The obvious arbitrage opportunity here is to terminate long distance traffic over local interconnection trunks and avoid the ILECs' switched access charges. The FCC should note, however, that a new regime – a non-cost based regime -- will invariably induce new arbitrage opportunities, not yet known to regulators and many of the parties commenting on the FCC's NPRM. In a way, the FCC is asking the impossible here: to imagine what opportunities entrepreneurs will exploit after a fundamental

change in intercarrier compensation regime. Those who know are business people and they are least like to tell the rest of us. The FCC's questions here are somewhat like asking what next year's fashion will look like – we will find out when we get there.

In general, however, as long as all rates are TELRIC based, it should not matter what arrangements carriers will settle on: in each and every case, carriers pay and receive rates based on true costs, TELRIC.⁹³

NPRM Paragraph 59

Under COBAK, how should "central office" be defined? Does COBAK create an incentive for carriers to locate central offices inefficiently? Is there an alternate solution?

OPUCT Comments:

OPUCT will leave it to other participants in this proceeding to comment on the various implementation issues addressed in this paragraph. However, OPUCT would like to note that many of the problems/issues that the FCC is seeking comment on, such as the distinction between remotes and host switches, are associated with bill and keep. By contrast, under a TELRIC based approach, there is no need to differentiate between host and remote switches; one needs only to identify their costs. The issues raised in paragraph 59, therefore, illustrate how bill and keep may raise more new problems than that it solves (if it solves any). It is also interesting

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⁹³ Of course, as is evident from state and federal proceedings, there is considerable debate over how to determine TELRIC costs in practice. As OPUCT has already discussed, in many instances, competitive pressures will force ILECs, and others, to reveal their true costs. See previous discussion on local switching costs and collocation arrangements.

to note how DeGraba's suggestion -- that toll charges be applied where it concerns a network of a large geographic area – relies completely on traditional CPNP cost causation. *That is, to resolve certain problems created by bill and keep, DeGraba has to revert to CPNP.*

NPRM Paragraph 60:

How great a problem will charges for unwanted calls be (especially regarding traffic-sensitive charges)? How can the unwanted-call issue be alleviated?

OPUCT Comments

OPUCT believes that most likely end-users will be adversely affected by the FCC's bill-and-keep proposals.

As recognized in the *NPRM*, a result of adopting bill and keep for intercarrier compensation is that the costs of terminating traffic (incoming calls) must now be recovered from the called party. In simplest of terms, this means that local end-user charges will almost certainly go up. For a number of reasons, OPUCT believes that such increases are undesirable and not in the public interest.

First, a policy that increases local subscription rates – without a demonstration that LEC costs have gone up – is at odds with the federal and state universal service objectives. Section 254 of the Telecommunications Act of 1996 identifies a number of significant universal service policies. For purposes of the current discussion, the most important ones may be stated as follows:

1. Quality services should be available at *just, reasonable, and affordable rates*.

- 2. Access to advanced telecommunications and information services at just, reasonable, and affordable rates -- should be provided in all regions of the nation
- 3. Consumers in all regions of the nation -- including low-income consumers and those in rural, insular, and high cost areas -- should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services. Further, these services should be offered at rates and in quality comparable to what is offered in urban areas.
- 4. All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.
- 5. Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services at just, reasonable, and affordable rates.

Because there will be upward pressure on local rates, each of the above principles is jeopardized by the FCC's bill-and-keep proposals.

Further, adding insult to injury, under the FCC's bill-and-keep proposals, end-users will pay for all incoming calls, whether they want those calls or not. They will pay for calls from telephone solicitors, such as banks, peddling lines of credit and mortgages, long distance companies, and various other companies that try to sell their wares by phone. Moreover, these activities will be greatly stimulated under bill and keep because it will be cheaper to engage in telephone soliciting. Further, end-users will pay for other unwanted and harassing calls, such as those from ex-spouses, crank-callers, stalkers, etc.

Technology will not solve this problem. Caller ID is partially helpful but does not resolve the problem entirely. Caller ID fails to identify all unwanted callers and since some

unidentified callers represent calls end-users do want to answer, end-users may inadvertently find themselves answering unwanted calls. Further, answering machines and voice-mail do not screen out all unwanted calls either. Once the answering machine or voice-mail picks the call up, the costs have been incurred and payment is due.

Moreover, Caller ID is not inexpensive. Thus, in addition to having to incur costs of incoming calls, end-users that want to protect themselves from incurring charges for unwanted calls have to incur the cost of Caller ID instead. Again, end-users will face higher charges one way or another. All these increases in telephone charges are at directly odds with federal and state universal service objectives.

Third, the FCC should note that its proposals would bring about a significant change in *calling etiquette*. Most people are aware that when they make calls, to loved ones or others, that they are infringing on those people's privacy. Now, people also have to be aware that they may be imposing a cost on those they call. For example, when grandchildren call their grandparents, they would cause them to incur telephone charges. While for some grandparents this may not be a problem, for others it may be and grandchildren may possibly call less frequently. This is but one example of how a change away from CPNP will bring about a change in calling etiquette and calling patterns. While this issue is obviously complex and changes in calling patterns will be highly individualistic, it appears to OPUCT that for the most part the change will not be in the public interest. It neither seems polite nor socially desirable to impose telephone charges on people one calls. *Indeed, it would feel like sending a letter by mail with postage due.* Most people would find this embarrassing – except of course those who are peddling their wares.

Some of the problems related to end-users paying for unwanted incoming calls are alleviated by establishing flat monthly charges. However, because not all users have the same volume of incoming calls, flat monthly charges almost certainly will create *cross-subsidies* from low volume end-users to high volume end-users. OPUCT is most concerned about the possibility that low volume residential end-users, who receive few incoming calls, would end up cross-subsidizing certain high volume business end-users, who receive large volumes of incoming calls. *This type of cross-subsidy would be totally inappropriate and run contrary to federal and state universal service objectives*.

NPRM Paragraph 62:

Are Atkinson-Barnekov's distinction between the "costs incremental to traffic and costs incremental to interconnection," and their notion of a "fully provisioned network" useful and valid, and if so, how could these concepts be applied (particularly to interconnection arrangements between networks with different structures)? How would a regulator resolve disputes between carriers concerning the incremental cost of interconnection?

OPUCT Comments:

The issues raised in this paragraph are a good illustration of why the bill and keep proposals will not result in regulatory efficiency. The problems addressed in this paragraph are far more easily resolved under a TELRIC-based regime that relies on well established notions of

⁹⁴ See Atkinson-Barnekov, supra note 43, at 18 ¶ 48.

cost causation.

NPRM Paragraph 64:

Will the DeGraba or Atkinson-Barnekov proposals generate other new problems? For example, will a bill-and-keep arrangement for ISP-bound traffic cause carriers to increase the rates they charge ISPs, which could then result in higher Internet access prices? To the extent that Internet access prices would rise, is the increase likely to take the form of a higher flat rate, or is it likely to result in the introduction of traffic-sensitive rates? What problems are likely to arise with alternative bill-and-keep proposals, and how should they be addressed?

OPUCT Comments:

The FCC's policies in the *NPRM* and its *ISP Intercarrier Compensation Order* are almost certainly fatal to the independent ISP industry and seriously threaten affordable Internet access. Since under the FCC's policies CLECs will no longer be adequately compensated by ILECs for terminating ISP-bound calls, the ISPs become a liability to the CLEC. One consequence of the FCC's policies may be, therefore, that the CLECs have to raise charges to ISPs. For example, CLECs may have to impose usage based charges on their ISPs to recoup the costs of terminating traffic; costs that under a traditional CPNP regime would be recouped from the calling party's carrier (for local calls, this would typically be the ILEC.) Alternatively, CLECs may opt to not serve ISPs at all. In a Texas proceeding, the Texas Internet Service Providers Association ("TISPA") notes that "[s]everal TISPA members have been advised by their CLEC providers

that they may choose to no longer provide service to ISP customers if SWBT wins. ⁹⁵" Given the already weakened state of independent ISPs, it is unlikely that the independent ISP industry will be able to endure these developments.

Further, the ILECs have traditionally argued in favor of imposing usage-based charges for Internet access. In the words of SWBT:

ISPs are access service customers. ISPs, like long distance carriers, sell a service to their subscribers that depends upon ISPs having access to the 'last mile' of the local telephone network to complete interstate – indeed often *global* – communications links. ... *ISPs should pay* ... the costs of access ... just as IXCs do. (Emphasis added.)⁹⁶

The likely results of the FCC's policies is that Internet access will most likely become more expensive and possibly measured. This outcome would be most unfortunate and a disservice to ratepayers and the U.S. economy.

NPRM Paragraph 65:

How would a bill-and-keep regime apply to LEC-CMRS interconnection? Would CMRS carriers be able to obtain adequate compensation for local call termination under COBAK, BASICS, and other bill-and-keep regimes?

OPUCT Comments:

The FCC makes the stunning observation that it is "not aware of complaints against CMRS carriers for excessive termination rates – even in unregulated interconnection

⁹⁵ Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 5.

arrangements – or for engaging in regulatory arbitrage." The FCC's comments here are a perfect illustration of the *arbitrary* policy perspective that has guided the FCC in its *ISP Intercarrier Compensation Order* and it the *NPRM*. Of course, the FCC has not received complaints from ILECs about the LEC-CMRS interconnection arrangements because the ILECs are making money hand-over-fist off them.⁹⁷ The arbitrary nature of the FCC's perspective is perhaps best summarized as follows:

Traf	ffic Imbalanc	ee	Payment Flows	Evaluation	Policy
					Recommendation
ILECs	terminate	more	ILECs pay money	Bad	Free termination under
traffic to	CLECs				bill and keep
CMRS	terminate	more	ILECs receive money	Good	"less of imperative to
traffic to	ILECs		•		apply new regime"

It is not clear from either the *NPRM* or the *ISP Intercarrier Compensation Order* why the two situations, which are so obviously identical, should receive such uneven treatment from the FCC. The uneven treatment is particularly disturbing since it so obviously favors the ILECs at the expense of other carriers, a policy preference that is hard to reconcile with the procompetitive intent of the Telecommunications Act of 1996.

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⁹⁶SWBT's Response to Taylor Communications group, Inc.'s Petition for Arbitration, Texas Public utility Commission, Docket No. 21982, page 7.

⁹⁷ In Texas alone, SWBT earned over \$200,000,000 in intercarrier compensation from wireless carriers, a number far greater than the amount paid to CLECs for ISP-bound traffic. See, *Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996*, Public Utility Commission of Texas, Docket No. 21982. Taylor Post-Hearing Brief, page 14.

F. Bill and Keep for ISP-Bound Traffic

NPRM Paragraphs 66, 67, and 68:

OPUCT Comments:

As noted, the *NPRM* is largely motivated by one narrow issue: ILEC payments to CLECs for ISP-bound traffic. In the words of the FCC: "the concerns motivating this *NPRM* primarily stem from certain wireline interconnection situations, *particularly those involving LEC-ISP interconnection*." (Emphasis added.) It is clear from the *NPRM* and the *ISP Intercarrier Compensation Order* that the FCC views the reciprocal compensation payments by ILECs to CLECs as a significant problem. As the FCC notes in the *ISP Intercarrier Compensation Order*:

We recognize that the existing intercarrier compensation mechanism for delivery of this traffic, in which the originating carrier pays the carrier that serves the ISP, has created opportunities for regulatory arbitrage and distorted the incentives related to competitive entry into the local exchange and exchange access markets.⁹⁹

The FCC then goes on to note that

[C]ompetitive local exchange carriers (CLECs), on average, terminate eighteen times more traffic than they originate, resulting in annual CLEC reciprocal compensation billings of approximately two billion dollars, ninety percent of which is for ISP-bound traffic. 100

In response to these perceived market distortions, the FCC has decided to intervene on behalf of the ILECs and to reduce the reciprocal compensation payments by regulatory mandate.

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⁹⁸ NPRM, paragraph 65. The same thought is expressed in, for example, paragraph 24.

⁹⁹ Intercarrier Compensation for ISP-Bound Traffic Order, paragraph 2.

¹⁰⁰ Id., paragraph 5.

The response of the FCC to this issue, in the *ISP Intercarrier Compensation Order* and *NPRM*, has been most unfortunate.

First and foremost, if the ILECs are troubled by the increasing flow of reciprocal compensation payments to CLECs, they could start to compete for ISPs. The ILECs still enjoy all the benefits of incumbency and there is no reason why they could not retain or win back ISPs. The truth is that the ILECs are simply not interested in serving ISPs. To the contrary, the ILECs have consistently been at war with ISPs and when given the opportunity will discriminate against this class of customers.¹⁰¹ The ILECs' unwillingness to serve ISPs is perhaps best illustrate by the following quote from a brief filed by the Texas Internet Service Provider Association ("TISPA") in a Texas proceeding:

ISPs have been fortunate that competitive carriers have sought to provide service to them – at reasonable prices and terms. SWBT never competed for service to ISPs; rather, the ILEC has been *hostile, unyielding, and antagonistic*. SWBT has refused to provide PRI service to ISPs in many areas, despite Commission rules requiring statewide availability. SWBT favors the SBC Internet affiliate in numerous ways, for dial-up and DSL service. SWBT has constantly sought to leverage its continued dominance in the local market into a large share of the enhanced services market and has actively done everything it can to harm ISPs. ¹⁰² At every turn, ISPs throughout the state have discovered that SWBT perceives them to be competitors; a group that must be driven from business, and certainly not deserving of high-quality, reliable and affordable local service. ¹⁰³

¹⁰¹ In California, a group of ISPs plans to file a complaint with the California Commission, accusing Pacific Bell and an affiliate of engaging in anti-competitive practices. "Pacific Bell May Face Complaint," *The New York Times*, July 26, 2001, page C1.

TISPA documented the numerous "bad acts" SWBT has committed against ISPs in comments to the FCC in SBC's § 271 case. *See*, TISPA Reply Comments in CC Docket 00-04.

¹⁰³ Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 3.

It is no wonder that ISPs prefer to be served by CLECs. The reciprocal compensation payments from the ILECs to the CLECs for ISP-bound traffic, therefore, reflect not market failure – as the FCC and the ILECs would have it -- but normally functioning market forces: customers select providers that serve them best.

There should be little doubt that if ILECs had been able to control the growth of the Internet as well as access to it, *then there would not have been an independent ISP industry*. All large ILECs offer their own Internet services in competition with the independent ISPs, and, as with other would-be competitors such as CLECs, this means that ILECs at every opportunity will seek to handicap them in their operations. These accusations sound harsh, but even a cursory review of telecommunications history provides ample support.

An important example of the ILECs' unwillingness to offer quality service to ISPs concerns collocation. As the FCC knows, ISPs are most efficiently served when they are collocated in the central office. One reason is that ISPs need to verify a customer's account before they provide Internet access; the look-up function is most easily performed if the customer database and computer equipment is collocated in the central office, as it eliminates the need for transport to a remote location. *In spite of these obvious benefits of collocation to ISPs, ILECs have yet to allow ISPs to efficiently collocate.*¹⁰⁴

¹⁰⁴ Of course, in spite of regulators best efforts, virtually all collocation arrangements that ILECs do offer are required by regulation but remain excessively expensive.

Further, ISPs are often served through ISDN services. Traditionally, however, ILECs have over-priced their ISDN services in order to avoid migration of business customers away from basic business lines to more efficient ISDN lines.¹⁰⁵ As a result, ISPs face unnecessarily expensive ISDN lines.¹⁰⁶

Most ILECs have the ability to offer individual case base ("ICB") pricing to specific customers. Under ICB pricing, ILECs are able to offer service at lower prices in demonstrably competitive situations. OPUCT is not aware of any instance in which ILECs have requested or used ICB pricing to attract or retain ISPs.

Last, it is well documented that ILECs have been remiss in provisioning ISPs with services in a timely fashion.¹⁰⁷ Given that most ISPs have experienced exponential growth, timely responses to service order requests are of critical importance.

The conclusion is inescapable: ILECs have never sought to compete for ISPs. It is no

¹⁰⁵ While such a migration might be beneficial to business users and society, it is not to the ILECs, since it reduces their profit margins.

¹⁰⁶ Since ISDN services are tariffed, ISPs pay no more than other customers

¹⁰⁷ For example, TISPA notes the following: "SWBT and the other ILECs have a miserable record on service to ISPs, according to a recent survey. ... A copy of the survey is attached. The results make it clear that *ISPs use CLECs because they were chased away by the ILECs*. The Commission must allow local competition to work; SWBT's problem is that it did work. The Internet is what it is today in large part because ISPs were able to find providers that valued them as customers and did not constantly attempt to drive them out of business." Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 3, footnote 2.

surprise, therefore, that ISPs have flocked to CLECs. CLECs have welcomed ISPs and provided them with all the services and responsiveness they did not receive from ILECs. CLECs provided ISPs with efficient collocation arrangements, affordable ISDN services, and timely responses to service request.

As noted, the FCC views the reciprocal compensation payments for ISP-bound traffic as a sign of market failure. For example, the FCC appears concerned about the notion that CLECs "terminate eighteen times more traffic than they originate." OPUCT believes that the FCC's concerns are unfounded.

OPUCT has already explained that the unbalanced traffic flows are a natural result of the fact that ILECs actively shun ISPs: since ISPs have almost exclusively incoming traffic, traffic flows will be out of balance. Further, the fact that traffic is out of balance is immaterial. For years, traffic flows between CMRS providers and ILECs have been out of balance, particularly in the early years of the wireless industry. Neither the FCC nor the ILECs have ever considered this to be a serious problem or a sign of market failure. It surely has never prompted the FCC or the ILECs to advocate imposing bill and keep so as to reduce the payments from CMRS providers to ILECs. The truth is, there is nothing fundamentally wrong with unbalanced traffic flows, or even with one-way networks.

The FCC also appears concerned about the fact that reciprocal compensation payments

¹⁰⁸ Intercarrier Compensation for ISP-Bound Traffic Order, paragraph 5.

from ILECs to CLECs may approximate two billion dollars annually, most of which is compensation for ISP-bound traffic. OPUCT again believes that the FCC's concerns are unfounded.

First, ILECs are perfectly capable of competing for ISPs and altering the traffic flows; as discussed, ILECs are simply not interested in doing so.¹⁰⁹ More importantly, however, there is no reason to believe that (1) the ILECs are hurt by paying CLECs for terminating ISP-bound traffic, and (2) CLECs are being overcompensated.

As long as reciprocal compensation rates are TELRIC based, the ILECs are paying reciprocal compensation charges based on how much it would costs them to terminate traffic. This means that if ILECs pay CLECs two billion dollars annually for terminating traffic, they must save approximately the same amount of money in expenses from not having to terminate the traffic themselves. That is, as long as reciprocal compensation charges are based on the ILECs' TELRIC for terminating traffic, by definition, the ILECs should be *indifferent* between having the CLECs terminate that traffic or terminating it themselves. Again, the observation that ILECs pay CLECs two billion dollars annually to terminate traffic is fairly meaningless – surely, it is no argument for arbitrarily reducing those payments.

Further, there is little or no reason to believe that CLECs are being overcompensated

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¹⁰⁹ There is evidence that most ILECs have contingency plans for winning back ISPs. These plans never had to be fully activated, however, since for the most part regulators have accommodated the ILECs on reciprocal compensation issues.

when they receive two billion dollars in reciprocal compensation payments. The reciprocal compensation payments are based on the ILECs' cost for terminating traffic. All indications are that the CLECs' costs for terminating traffic are higher. As a matter of common sense, the CLECs are for the most part start-up operations that cannot possibly achieve the economies of scale enjoyed by the ILECs. In fact, the FCC itself has noted this on various occasions. Most notably, in its *UNE Remand Order*, ¹¹⁰ the FCC found the following:

The average cost of providing service to customers decreases as the number of customers served increases. As a general rule, we find that scale economies are more pronounced when switches operate at full utilization. Because incumbent LEC switches serve the majority of customers for local exchange service, they are likely to be able to take advantage of substantially greater economies of scale than the competitor would using its own switches.

The FCC then went on to note:

We find, as a general matter, that the total costs of self-provisioning a switch impose on the requesting carrier a significant cost disadvantage relative to the incumbent LEC, particularly in its early stages of entry.¹¹¹

Thus, the FCC itself has found that CLECs generally speaking will have higher switching costs than ILECs. This means that if CLECs are compensated based on the ILECs' costs of terminating traffic, then most likely they are being under-compensated relative to their own costs. In sum, all indications are that when ILECs pay CLECs two billion dollars annually for terminating traffic, the CLECs are being under-compensated rather than over-compensated.

¹¹⁰ Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Third Report and Order, (1999) ("UNE Remand Order"), paragraph 258.

¹¹¹ Id., paragraph 259.

From society's perspective it may be optimal to have CLECs terminate ISP-bound traffic. The Commission should consider that since most CLECs are start-up operations and often have significant amounts of spare switching capacity; it would be economically efficient to use this spare capacity for terminating fast growing ISP-bound traffic. By contrast, since ILECs are operating mature networks, it is entirely possible that fast-growing ISP-bound traffic may cause them to expand their facilities. From society's perspective, therefore, it is optimal to have the CLECs use their spare switching capacity to accommodate this fast-growing traffic. Moreover, as long as reciprocal compensation rates are set at TELRIC, the ILECs receive the correct price signals for whether it is more efficient to terminate ISP-bound traffic themselves or to "outsource" the call termination functionality to CLECs. 112

In short, the traffic imbalances between ILECs and CLECs for ISP-bound traffic do not constitute market failure. To the contrary, the traffic flows are the result of normal market forces and as long as reciprocal compensation is TELRIC based, economic welfare is maximized.

Unfortunately, the FCC has interrupted these market dynamics and used its regulatory powers to reduce the payments from ILECs to CLECs in a rather ad hoc fashion. In its *ISP Intercarrier Compensation Order*, the FCC adopted a sliding scale for compensation to carriers for ISP-bound traffic. The highest rate of compensation permissible will be \$.0015/minute-of-

¹¹² When a CLEC serves the ISP, it is the CLEC that performs the call termination functionality for ISP-bound traffic that originated on the ILEC's network. If the ILEC believes that the CLEC is charging too much for the call termination functionality, the ILEC can win back the ISP to self provide the call termination functionality.

use ("MOU"). Over time, this rate cap is reduced to \$.0007/MOU. Furthermore, the FCC imposed a cap on the number of MOUs on which a carrier may receive compensation. A review of the *ISP Intercarrier Compensation Order* reveals, however, that these recommendations lack any serious foundation in cost considerations. The FCC is now contemplating taking its intervention even further and mandating bill and keep, irrespective of traffic flows. This means, among other consequences, that CLECs would receive no compensation at all for ISP-bound traffic.

The undesirable outcomes of the FCC's approach in the *ISP Intercarrier Compensation Order* and the current *NPRM* cannot be overstated. First, since the reciprocal compensation payments have grown to approximately two billion dollars annually, CLECs that serve ISPs will see a radical reduction in revenues. If the FCC follows through on its proposal to impose bill and keep on all traffic between carriers, the revenue impact will be even more dramatic. Not only will all reciprocal compensation revenues disappear, but some or all of the switched access revenues may disappear as well.

In the *ISP Intercarrier Compensation Order*, the FCC notes that its declining rates reflect a downward trend in intercarrier compensation rates in recently negotiated agreements "suggesting that they are sufficient to provide a reasonable transition from dependence on intercarrier payments *while ensuring cost recovery*." (Emphasis added.) The FCC's claim that its adopted rates ensure cost recovery is at odds with any cost data and financial statistics that

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¹¹³ ISP Intercarrier Compensation Order, paragraph 8.

OPUCT has seen. There were few, if any, profitable CLECs before the FCC and state commissions started to reduce compensation for ISP-bound traffic. It is difficult to see, therefore, how eliminating no less than two billion dollars of annual revenues from an industry that is already in a state of meltdown is "ensuring cost recovery."

Further, as a result of the FCC's accommodations, ILECs will never have to make the hard choice between continuing to pay reciprocal compensation for growing volumes of ISP-bound traffic *or* beginning to compete for ISPs. By contrast, if ILECs were forced to compete for ISPs there would be, at a minimum, four positive results:

- 1. Since collocation is critically important to ISPs, ILECs would have to offer efficient collocation arrangements to ISPs. Given the non-discrimination provisions in the Telecommunications Act of 1996, ILECs would have to extend similar arrangements to CLECs. The benefits to competition of efficient collocation would be very significant.
- 2. If ILECs had to compete for ISPs, they would be induced to reveal their true costs, as they did before the FCC issued its *ISP Intercarrier Compensation Order*. In an effort to control burgeoning reciprocal compensation payments, ILECs were increasingly forced to reveal the real cost of certain network elements. We have learned, for example, that local switching does not costs between \$0.004 and \$0.002 per MOU, as presumed by the FCC in paragraph 811 of the Local Competition Order, but significantly less.¹¹⁴
- 3. ILECs would have an added incentive to lower the artificially high prices for ISDN services.
- 4. ISPs and users of their services would experience the benefits of competition,

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¹¹⁴ For example, in New York, the per MOU rates for terminating local switching for Zones 1a, 1b, and 2 are \$0.000982, \$0.000813, and \$0.00157, respectively. See Recommended Decision, May 16, 2001, NYPSC Case 98-C-1357, proceeding on Motion of the Commission to Examine New York Telephone company Rates for Unbundled Network Elements. In Texas under the local switching rates for levels 1 through 4 are \$0.0021, \$0.0011, \$0.0012, and \$0.0014, respectively. See PUCT Docket 122199, T2a. In Massachusetts, Verizon itself just recently proposed local switching termination rates of only \$0.00105 per MOU. See Verizon Direct Testimony, Massachusetts D.T.E. 01-20 UNE/Resale Proceeding. May 4, 2001.

consistent with the importance of ISPs in providing affordable Internet access to ordinary ratepayers.¹¹⁵

OPUCT believes that the FCC's polices, expressed in the *ISP Intercarrier Compensation Order* and the *NPRM*, now threaten to extend the ILECs' telephone monopoly to access to the Internet. While there are alternative means of accessing the Internet, such as cable and wireless connections, the ILECs' control over ubiquitous local loop facilities position them to be the dominant Internet access providers. The confluence of the ILECs' market power and stated preference for measured Internet service and the FCC's intent to have carriers recoup the cost of incoming calls from their own end-users may cause ILECs to propose *measured*, *usage based Internet access*. For example, SBC's preferred position on Internet traffic is to treat it as traditional long distance traffic:

ISPs are access service customer. ISPs, *like long distance carriers*, sell a service to their subscribers that depends upon ISPs having access to the 'last mile' of the local telephone network to complete interstate – indeed often *global* – communications links. ... *ISPs should pay* ... the costs of access ... just as IXCs do. (Emphasis added.)¹¹⁶

This trend toward measured Internet access is dangerous and poses a threat to the interests of residential and small business customers and, indeed, the nation at large.

In sum, the FCC's policies regarding ISP-bound traffic do not bode well for customers, the ISP industry, or the CLEC industry. The FCC should note that even though the issues raised

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According to The Yankee Group, almost 90% of the estimated 63.5 million residential Internet users still use ordinary dial-up services. See "Digitally Disenfranchised," *The New York Times*, August 6, 2001, page C1.

in the *NPRM* are vitally important to ISPs, the ISP industry is in such bad shape that an organization such as Texas Internet Service Providers Association ("TISPA") is not filing comments for lack of resources. The absence of TISPA in this proceeding is amazing, given that these proceedings may mark the end of the independent ISP industry. As TISPA notes, in a Texas proceeding on intercarrier compensation for ISP-bound traffic, "[s]everal TISPA members have been advised by their CLEC providers that they may choose to no longer provide service to ISP customers if SWBT wins." SWBT's policy recommendation in that proceeding was: *bill and keep for ISP-bound traffic*. As discussed below, the CLEC industry is in equally bad shape. Adding yet another regulatory shock would be very untimely. Indeed, one may cynically note that a few more regulatory shocks and the issue of compensation between competing carriers for intercarrier traffic will be permanently resolved – there won't be any such traffic.

G. Bill and Keep for Traffic Subject to Section 251(b)(5)

NPRM Paragraph 69:

What are the benefits of bill and keep for traffic subject to section 251(b)(5), versus the current per-minute reciprocal compensation rates, particularly regarding (a) relative incentives, (b) promotion of competition and negation of the effects of market power, and (c) the pricing signals provided and the relation between actual costs and prices determined? How should the Commission weigh the advantages and disadvantages of bill and keep, including in comparison to any particular type of traffic currently exchanged among interconnected carriers?

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¹¹⁶SWBT's Response to Taylor Communications group, Inc.'s Petition for Arbitration, Texas Public utility Commission, Docket No. 21982, page 7.

¹¹⁷ Proceeding to examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Public Utility Commission of Texas, Docket No. 21982. TISPA Amicus Curaie Brief, page 5.

OPUCT Comments:

The issues raised in this paragraph have been answered in the introductory section to OPUCT's comments. Specifically, the issues in NPRM Paragraph 69 are addressed as follows:

- (a) Issues of relative incentives are addressed in section II.E: The Proposals for Mandatory Bill and Keep Would Create a Host of Arbitrage Opportunities while Costbased rates Promote Regulatory Efficiency.
- (b) *Competitive issues* are addressed in section II.F: The CLEC Industry Is Weak and Requires Regulatory Stability.
- (c) *Cost issues* are addressed in section II.A: The Proposals for Mandatory Bill and Keep Do not Represent a Unified Intercarrier Compensation Regime a TELRIC-Based Regime Would Be Far Better.

NPRM Paragraph 70:

If carriers must recover their transport costs from their end-users, does the existing rule, that the originating carrier must bear the costs of transporting traffic to its point of interconnection with the terminating carrier make sense?

OPUCT Comments:

Under the current CPNP regime, cost causation is well defined and all problems can be worked out in a reasonable and consistent manner using traditional cost causation. The issues raised in this paragraph are, again, a good illustration of the problems that will emerge from imposing a mandatory bill-and-keep regime, a regime that lacks a solid foundation in economic

cost concepts. As noted previously, the transport issues cannot be satisfactorily resolved under bill and keep. (*See* discussion under Section III.C. 146, which essentially explores the same issues.)

NPRM Paragraph 71:

Under bill and keep, should the Commission allow LECs to continue charging each other for delivering transiting traffic that originates on the networks of a third carrier, an issue raised by Qwest¹¹⁸? CMRS carriers also originate and terminate three-carrier calls, some of which are governed by reciprocal compensation. What issues or problems do the current intercarrier compensation rules present for three-carrier calls and how might bill and keep affect such calls?

OPUCT Comments:

The issue of how a third carrier should be compensated is adequately addressed in the DeGraba and Atkinson-Barnekov papers. In essence, the issue raised by Qwest concerns the common situation of a long distance call, where the third carrier is an IXC, or transiting/transport services in situations where two LECs do not have interconnection facilities. Even under bill and keep, the third carrier requires compensation. The third carrier can be compensated either by the end-user, in the case of a long distance call, or by the other two carriers, where it concerns transiting/transport services offered by the third carrier.

¹¹⁹ ILECs may offer transitting/transport services, for example, to two CLECs that are not interconnected.

¹¹⁸ Qwest ex parte in CC Docket No. 96-98, Appendix B, at ii (filed Nov. 22, 2000.)

The larger problem is, for all the reasons discussed in the introductory section to these comments, the imposition of mandatory bill and keep itself.

NPRM Paragraph 72:

Under bill and keep, should interconnecting CLECs still be obligated to provide one POI per LATA, and how should POIs be selected? If a CLEC chooses a POI outside a local calling area, should the LEC be obligated to meet the CLEC there? Or, should the CLEC be required to locate in every local calling area, or pay the ILEC transport and/or access charges if it does not? Should originating carriers be required to deliver calls to all of a CMRS carrier's POIs? Should the Commission promulgate rules governing the technical requirements of interconnection? How should the costs of interconnection be allocated between carriers in this context and how will carriers allocate the costs of actual interconnection facilities? How should the costs for internal network upgrades necessary for interconnection be allocated?¹²⁰

OPUCT Comments:

It is obvious that if the FCC mandates bill and keep irrespective of traffic flows, all issues raised in this paragraph will become even more important than they are currently. It is interesting to note that while the DeGraba and Atkinson-Barnekov papers claim that bill and keep may solve certain common cost allocation problems (and OPUCT has already discussed why it does not), the Commission recognizes that bill and keep will create other allocation problems, such as how to allocate the costs of interconnection between carriers, including the costs of internal network upgrades necessary for interconnection.

As noted, it will be very difficult for carriers to accommodate traffic from other carriers

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¹²⁰ See Atkinson-Barnekov, supra note 43, at 13-14 (showing that the incremental cost of interconnection includes internal provisioning necessary to handle traffic exchanged with the interconnecting carrier).

without expecting some compensation for their costs: under bill and keep, there will be none. Given the already contentious nature of intercarrier relationships, OPUCT maintains that the traditional CPNP regime with its well-defined notions of cost causation will make it far easier to deal with these issues than the mandatory bill-and-keep regime proposed in the NPRM.

NPRM Paragraph 73, 74, 75, 76 and 77:

Will a bill-and-keep rate structure for traffic subject to section 251(b)(5) be consistent with the 1996 Act? Will a bill-and-keep regime satisfy both the requirement for carriers to provide "reciprocal compensation" under section 251(b)(5), and the reciprocal compensation pricing standards set forth in section 252, even when traffic is not in balance? Will bill and keep provide for the "mutual and reciprocal recovery" of costs when traffic is not in balance? Will the opportunity to recover costs from end-users "afford[s] the mutual recovery of costs?" Will a bill-and-keep arrangement "afford the mutual recovery of costs through the offsetting of reciprocal obligations" when traffic is not in balance? Does the use of the term offsetting imply that traffic must be balanced?

OPUCT Comments:

For the most part, OPUCT has already addressed these issues in response to *NPRM* paragraph 44 (Section III.C.). OPUCT will briefly reiterate the more pertinent points.

Underlying the notion of bill-and-keep is that carriers are compensated in kind. That is, under bill-and-keep, carriers decide to barter their call termination functionalities in approximately offsetting proportions. As Section 252(d)(2)(B)(i) of the Telecommunications Act of 1996 notes:

(B) RULES OF CONSTRUCTION.—

This paragraph shall not be construed-- (i) to preclude arrangements that afford the *mutual recovery of costs through the offsetting* of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements); (Emphasis added.)

It is important to note that the telecommunications Act of 1996 speaks of "the mutual recovery of costs through the offsetting of reciprocal obligations." This process, by which carriers barter their call termination functionalities in approximately equal proportions is only possible if traffic is approximately in balance. If traffic is significantly out of balance, then obviously the process of bartering call termination functionalities will leave one carrier significantly under-compensated. The same conclusions hold, though to a lesser degree, if companies have "dissimilar costs or cost structures."

Last, but not least, when traffic is out of balance under bill and keep, carriers themselves may seek to avoid serving certain types of customers, such as ISPs, with large volumes of incoming calls. These customers cause significantly higher network costs than others, and as such, run the risk of becoming the *persona non grata* among telecommunications customers. Particularly where it concerns ISPs, this result would be most unfortunate, given the importance of the independent ISP industry to affordable Internet access.

H. LEC-CMRS Intercarrier Compensation

NPRM Paragraphs 90 - 96.
What rules should the Commission adopt to govern LEC-CMRS interconnection arrangements?

OPUCT Comments:

In general, the Commission should adopt a unified regime across all forms of intercarrier

transactions. OPUCT has already recommended that this regime be TELRIC based. However, even if the Commission deviates from TELRIC-based rates, it is still important to maintain consistency across various forms of intercarrier relationships, otherwise the Commission will only be inviting arbitrage problems and create further instability in the industry. Given that LEC-CMRS interconnections are not inherently different than, say, LEC-LEC interconnection, it is important that the regimes be similar rather than dissimilar.

I. Bill and Keep for Interstate Access Charges

NPRM Paragraph 97.

If we adopt a bill-and-keep rule for the intercarrier arrangements that currently fall under the access charge rules, should we attempt to apply it at the same time, and in the same manner, for all types of LECs? Will the possible benefits of bill and keep dissipate if it is phased in over a period of years? Will a staggered approach to reforming intercarrier compensation create certain opportunities for regulatory arbitrage? What is the best way to proceed with this phase in the development of a pro-competitive intercarrier compensation regime?

OPUCT Comments:

OPUCT has already discussed how adopting bill and keep for access traffic will put upward pressure on local end-user rates. This will create a host of problems and may potentially lead to a highly undesirable situation in which low-volume users end-up cross-subsidizing high volume customers.

It is not clear how a phase-in of bill and keep will alleviate these problems. Moreover, a phase-in of bill and keep will create arbitrage opportunities and may induce carriers to focus on short term but transitory profit opportunities.

J. Reforming the Existing Calling-Party's-Network-Pays Regime

NPRM Paragraphs 98 - 114.

Can (and if so how) existing CPNP interconnection regimes be reformed in the event that the Commission decides not to adopt bill and keep?

OPUCT Comments:

OPUCT has already discussed the various objectives for a unified intercarrier compensation regime in the introduction to these comments. Among those objectives was the requirement that a unified regime be consistent across all aspects of intercarrier transactions on the wholesale level. In addition, a unified regime should allow a consistent application of cost concepts across all regulatory proceedings that rely on costs, such as UNE cost proceedings, USF proceedings, and alternative regulation proceedings. OPUCT has also noted that TELRIC-based rates meet all these requirements.

Further, the FCC's exploration of short marginal costs, as an alternative to bill and keep or the current regime, seems again motivated by the view that there is a problem with the current intercarrier compensation regime, specifically where it concerns compensation for ISP-bound traffic. OPUCT has already discussed at some length why it disagrees with the Commission on this issue. Again, OPUCT sees no reason to recommend an alternative to TELRIC-based rates.

K. Virtual Central Office Codes

NPRM Paragraph 115

What effect do virtual central office codes (NXXs) have on the reciprocal compensation and transport obligations of interconnected LECs? Do some

LECs inappropriately use virtual NXXs to collect reciprocal compensation for traffic that the ILEC is then forced to transport outside of the local calling area? Considering that the Commission has given some authority to state PUCs to police the misuse of virtual NXXs: (1) Under what circumstances should a LEC be entitled to use virtual NXX codes? (2) If LECs are permitted to use virtual NXX codes, what is the transport obligation of the originating LEC? (3) Should the LEC employing the virtual NXX code be required to provide transport from the central offices associated with those NXX codes?

OPUCT Comments:

With respect to the issue of Virtual NXXs, the FCC should note that Virtual NXXs are critical to ISPs. A virtual NXX allows a caller served by an ILEC switch in location A to dial up an ISP served by a CLEC switch outside the ILEC's local calling scope, in location B, without being assessed toll charges. That call is treated like a local call because of the virtual NXX associated with CO A, assigned to the ISP served by CO B. This configuration is critical to the ISP because it wants its customers to make *local* calls for Internet access. Without the use of the Virtual NXX, the ISP would have to establish a presence in each central office where it serves a customer, an alternative that is just not economically viable.

An excessive concern about the CLEC's use of Virtual NXXs is inappropriate. First, without the Virtual NXX, no calls to the CLECs would occur since the CLEC would not be able to service the customers that it does. *So, there are no forgone toll charges*. Further, the notion of forgone profits is inappropriate in any event, as the Commission found in the Local Competition Order.

Second, if the Commission adopts bill and keep, then each carrier is responsible for recovering the cost of terminating a call from its own end-users. Thus, the ILEC has the option

of recovering transport costs from its own end-users.

L. Can CPNP Regimes Resolve the Existing Interconnection Issues and Will They Be Administratively Feasible?

NPRM Paragraph 116-120.

Can CPNP be modified to resolve the existing problems regarding terminating access monopoly and tariff arbitrage?

OPUCT Comments:

OPUCT has already noted in the introductory sections to these comments the various objectives for a unified intercarrier compensation regime. Further the issue of terminating access monopolies has been discussed at some length in response to NPRM paragraph 38, which also addressed this issue. OPUCT addressed the issue of terminating access monopolies separately for both local and long distance traffic.

OPUCT has also expressed the belief that there is sufficient accumulated knowledge on TELRIC costs, at the federal and state levels, to complete a TELRIC based regime across all intercarrier transactions and proceeding involving costs, such as USF proceedings, UNE-cost proceedings, and alternative regulation proceedings.

M. Jurisdictional Responsibility

NPRM Paragraph 122.

How might each proposed intercarrier compensation reform affect the balance of responsibilities between the Commission and the states?

OPUCT Comments:

The respective jurisdictional authority of the FCC and state public utility commissions may cause a number of potential problems. It is quite conceivable that if the FCC mandates bill and keep for all intercarrier compensation, including access traffic, that states will not mirror the FCC's policies but maintain the existing regimes in order to preserve the LECs' access revenues. The resulting patchwork of intercarrier compensation across jurisdictions will further induce arbitrage opportunities.

N. Impact on End-User Prices and Universal Service

NPRM Paragraph 123 - 124.

How significant might any increase in flat-rated charges resulting from bill and keep be, and how might an increase affect telephone penetration levels? How would bill-and-keep impact universal service?

OPUCT Comments:

The impact of the FCC's proposed bill-and-keep proposals has been discussed in considerable detail in the introduction to these comments. See, Section II.B: The Proposals for Mandatory Bill and Keep Will Hurt the Preservation and Promotion of Universal Service.

IV. MARKET CAPITALIZATION ANALYSIS

This analysis calculates the change in market value of the CLEC industry over the period of December 31, 1999 through April 23, 2001, based on the value of the common shares held by investors. For the IXC and CLEC industries the total decline in market capitalization over this period is a staggering \$405 billion, or 64%. The data for just CLECs, excluding IXCs, is \$122 billion, or 69%. By contrast, the RBOCs experienced declines in market capitalization over the same period of \$79 billion, or only 16%, a percentage roughly comparable to the decline in the S&P 500 Index.

A. Description of Analysis Undertaken

The purpose of this analysis is to calculate the market capitalization of CLECs and IXCs in order to assess the change in value that investors have placed on key players in the domestic telecommunications market. This change in value was determined from December 31, 1999 to April 23, 2001. Market capitalization as of December 31, 1999 was used as the baseline value for two primary reasons: (1) this point in time was still within the bull market period before the first significant market correction took place in the first quarter of 2000; and (2) the components necessary to calculate market capitalization, common shares outstanding and market price, were both readily available from publicly available sources such as websites that provide current and

¹²¹ Tables IV.2 through IV.4 list the CLECs, IXCs, and RBOCs for which the change in market capitalization has been calculated.

historical price quotes and Securities Exchange Commission ("SEC") filings.

The companies included in the analysis were classified into three categories:

(1) CLECs & Wholesale Suppliers

This category includes CLECs and wholesale suppliers. Not included are the CLEC divisions of the major IXCs – they are included in the third category described below. (The companies included in this category are identified in Table 1 below.)

(2) RBOCs

This category includes the four RBOCs: Qwest, SBC, BellSouth, Verizon.

(3) Major IXCs

This category includes the major IXCs: Williams Communications, Level 3 Communications, Global Crossing, Sprint, WorldCom, AT&T.

Major IXCs such as AT&T, WorldCom and Sprint that also operate as CLECs were separated from the CLECs & Wholesale Suppliers category because the nature and scope of their operations are quite different from the other CLECs. Additionally, the Kellogg-Huber Report identifies these IXCs as the largest purchasers of special access from ILECs as well as major self-suppliers.

The Debt to Equity ratio was also determined for each company over the same time period to measure changes in relative financial strength based on the amount of debt used to fund operations versus stockholder's equity. Large ratios or ratios that increase over time indicate declining financial strength as debt becomes a larger component of the firm's capital structure. This can be attributed to a greater use of debt as equity markets dry up, declining stockholder's equity due to accumulated operating deficits, or a combination of both.

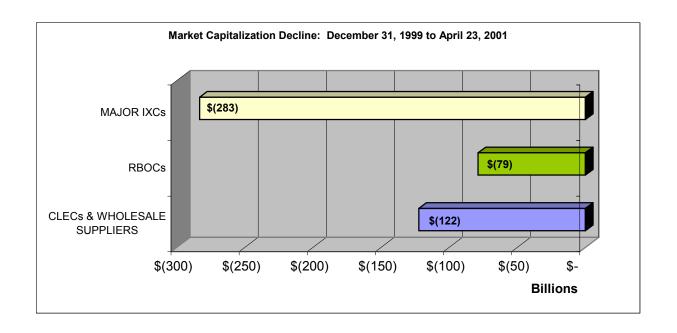
B. Result of the Analysis

The analysis demonstrates that the class of competitive carriers has suffered serious financial setbacks over the last year. The decline in market capitalization for the three categories, CLECs & Wholesale providers, RBOCs and Major IXCs, is summarized as follows:

TABLE IV.1

CATEGORY	DECLINE IN MARKET	% DECLINE IN
	CAPITALIZATION	MARKET
		CAPITALIZATION
Category 1:		
CLECs & Wholesale Providers	(\$122,332,734,915)	- 69%
Category 2:		
RBOCs	(\$78,812,529,670)	- 16%
Category 3:		
Major IXCs	(\$283,267,806,743)	- 62%

A more detailed breakdown of the decline in market capitalization for these three categories of carriers is found in tables 1, 2, and 3 below. The summary results are illustrated in the graphs below.



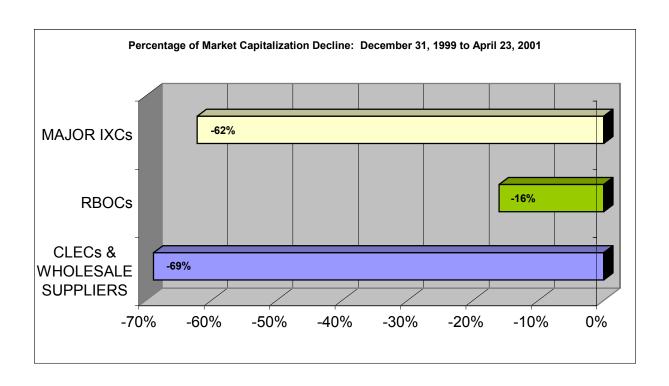


TABLE IV.2

Decline in market capitalization for CLECs and Wholesale providers (Category 1)

COMPANY	(CHANGE IN MARKET CAP	% CHANGE
Advanced Radio Telecom Corp.	\$	(671,232,000)	-100.0%
Convergent	\$	(454,691,750)	-100.0%
E.spire	\$	(297,308,213)	-100.0%
ICG	\$	(895,518,750)	-100.0%
NorthPoint	\$	(590,232,000)	-100.0%
WinStar	\$	(6,293,910,000)	-100.0%
CoreComm	\$	(2,272,163,940)	-99.3%
Teligent	\$	(3,225,250,990)	-99.2%
Rhythms	\$	(2,358,818,570)	-98.5%
Network Access	\$	(1,455,879,200)	-97.4%
Covad	\$	(5,092,290,540)	-96.2%
XO	\$	(21,035,186,250)	-94.5%
Mpower	\$	(1,655,831,750)	-93.6%
RCN Corp.	\$	(3,438,536,190)	-91.9%
DSL.net, Inc.	\$	(766,029,353)	-90.9%
Adelphia	\$	(3,018,455,740)	-90.6%
Net2000	\$	(810,360,150)	-90.6%
Z-tel	\$	(1,139,292,100)	-89.3%
Metromedia Fiber Networks	\$	(20,206,149,523)	-88.1%
CTC Comm.	\$	(995,923,270)	-87.8%
Pac-West	\$	(822,203,800)	-87.7%
Electric Lightwave	\$	(816,273,470)	-86.8%
NetworkPlus	\$	(979,484,070)	-85.1%
US LEC	\$	(752,198,180)	-84.8%
McLeodUSA	\$	(23,073,189,055)	-82.9%
Allegiance	\$	(7,355,564,550)	-81.9%
ITC DeltaCom	\$	(1,306,396,125)	-79.4%
FiberNet	\$	(300,686,625)	-76.7%
Focal Comm.	\$	(1,101,644,765)	-75.2%
Choice One	\$	(499,530,300)	-63.9%
Intermedia	\$	(1,249,108,138)	-58.4%
Optelecom	\$	(4,311,250)	-52.4%
Cox	\$	(6,794,000,500)	-21.8%
Time Warner	\$	(606,882,060)	-11.6%
Cablevision	\$	(893,720,500)	-6.8%
CLEC & WHOLESALE SUPPLIERS	\$	(122,332,734,915)	-68.8%

TABLE IV.3

Decline in market capitalization for RBOCs (Category 2)

COMPANY	CH	IANGE IN MARKET CAP	% CHANGE
Qwest	\$	(24,171,892,240)	-28.2%
SBC	\$	(34,504,732,000)	-20.6%
BellSouth	\$	(11,404,868,430)	-13.0%
Verizon	\$	(8,731,037,000)	-5.8%
RBOCS	\$	(78,812,529,670)	-16.0%

TABLE IV.4

Decline in market capitalization for Major IXCs (Category 3)

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	C	HANGE IN MARKET	%	
COMPANY		CAP	CHANGE	
Williams Communications	\$	(11,425,918,600)	-85.2%	
Level 3 Communications	\$	(25,157,193,250)	-82.9%	
Global Crossing	\$	(30,081,852,500)	-75.3%	
Sprint	\$	(40,062,140,460)	-68.1%	
WorldCom	\$	(96,757,337,250)	-64.1%	
AT&T	\$	(79,783,364,683)	-49.1%	
MAJOR IXCs	\$	(283,267,806,743)	-62.1%	